COMFORT B Scoring
The basics . . .

What is scored? The COMFORT Behavioural Score is a non-intrusive scoring system consisting of ***6 behavioural*** indicators scored following a **2 minute observation** period. The modified COMFORT Behavioural Score was developed by removing the physiological aspects of the original tool and adapting the respiratory category to allow assessment of both intubated and self-ventilating children.

. . . . . **Why?** It is validated for use in assessing pain and discomfort in intubated and self ventilating PICU patients. COMFORT B can ***assess the effectiveness of sedation*** administered. Maximising individual patient comfort while minimising the potential for adverse events associated with sedation in the PICU.

Who is it used for? . . . The COMFORT B Score is suitable for assessing pain & discomfort in mechanically ventilated & self-ventilating children 0-18 years of age

. . . . . **Who is it <u>not</u> suitable for?** Children who are on ***neuromuscular blocking agents*** cannot be assessed using the COMFORT B Score as they are unable to display any of the behavioural cues used to assess COMFORT.

<u>Do not</u> . . . assess a COMFORT Score within ***20mins*** of an intervention -suction, reposition, patient handling, procedures etc.

. . . . . **Do** Position yourself where you can easily ***observe the patient's*** body movements and facial expressions ***without distracting*** the patient. On completion of the 2-minute observation period feel the patient's arm or leg muscle tone.

COMFORT B Score

Alertness	**1 - Deeply asleep (eyes closed, no response to changes in environment)** **2- Lightly asleep (eyes mostly closed, occasional responses)** **3 - Drowsy** **4 - Awake & alert** **5 - Awake & hyper-alert**	**How responsive is the patient to the ambient light, sound and activity around them? Monitors, phones, talking**
Calm/ Agitation	**1 – Calm** **2 - Slightly anxious** **3 - Anxious** **4 - Very anxious** **5 - Panicky**	**How would you rate the patient's level of anxiety?**
Respiratory response ***(Intubated & ventilated)***	**1 - No spontaneous respiration, no cough** **2 - Spontaneous breathing no resistance to ventilator** **3 – occasional cough or resistance to ventilator** **4 - Actively breathes against ventilator or coughs** **5 - Fights ventilator coughing or choking**	**How comfortable and compliant is the patient with ventilation via ET tube?**
Respiratory response ***(crying & self ventilated)***	**1 – Quiet breathing, no crying sound** **2 – Occasional sobbing or moaning** **3 – Whining or monotonous sound** **4 – Crying** **5 – Screaming or shrieking**	**How would you score the intensity of verbal response?** *Significance should be given to the characteristics of the cry <u>not</u> to the presence of tears*
Physical Movement	**1 - No movement** **2- Occasional (three or fewer) slight movements** **3 - Frequent, (> 3) slight movements** **4 - Vigorous movements limited to extremities** **5 - Vigorous movements include torso & head**	**What is the intensity & frequency of the patient's movements?**
Muscle Tone	**1 - Muscles totally relaxed; no muscle tone** **2 - Reduced muscle tone; less than normal** **3 - Normal muscle tone** **4- Increased muscle tone, increased flexion of fingers & toes** **5- Extreme muscle rigidity & flexion of fingers & toes** *In cases of complex needs/CP/underlying neuromuscular condition assess with a parent for the 1st assessment.*	**How does the patient's muscle tone compare to a normal awake & alert child of the same age/stage of development? Flex /extend limb.** (*Assess this section last)*
Facial Muscles	**1 – Facial muscles totally relaxed** **2 – Normal facial tone** **3 – Tension evident in some muscles (not sustained)** **4- Tension evident throughout muscles (sustained)** **5- Facial muscles contorted and grimacing**	**How does the patient's facial movement/ tension compare to that of an awake & alert child of the same age/stage of development?**

. . . a little COMFORT B refresher . . .

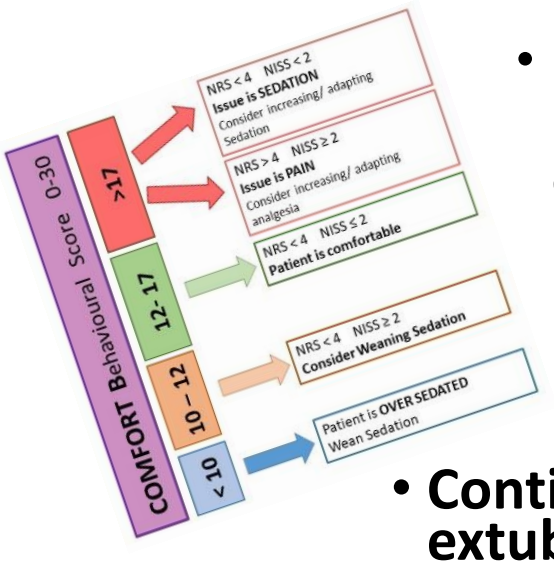
- **COMFORT B Scores <u>can</u> be used** to assess sedation & comfort in patients with complex needs. *When scoring each category ask yourself* ***'what is normal for this child?'***

Ask their parent ***to tell you <u>their</u> normal!*** *A grimace could be their happy face.*

- **DO NOT** COMFORT score patients who are on **neuromuscular blocking agents**. The score is dependant on the interpretation of behavioural cues which cannot be displayed if the patient is muscle relaxed.

- Assess **COMFORT B Scores** a minimum of 6 hourly.

3-4 hourly *really is the optimum for patient comfort while not overloading the bedside nurse with extra work*.



- If your patients' COMFORT B score is not in their set target range you must **do something about it!**

- If you make a change to sedation/ analgesia you must **reassess** the COMFORT score **one hour later.**

- **Continue to assess COMFORT B score until point of extubation** even if all sedative agents have been discontinued.

- Patients can safely extubate with a COMFORT B score of 12-17

and when you extubate. . .

- **Following extubation** patients should continue to have their COMFORT B score assessed **until at least 12- 24 hours after all sedative & opioid agents have been discontinued**.

Eg if the patient extubated at 10am and all sedative agents were stopped at 10am the patient should continue to have COMFORT B scores measured until at least 10pm if not 10am the following day.

If the patient has been on IV/enteral ***sedation for more than 5 days*** *it would be recommended to continue assessing COMFORT B scores for a* ***minimum of 24hours after all sedative agents have been discontinued***.

COMFORT Behavioural Score Titration Guide

COMFORT Behavioural Score 0-30

>17

NRS < 4 NISS < 2
Issue is SEDATION
Consider increasing/ adapting Sedation

NRS > 4 NISS ≥ 2
Issue is PAIN
Consider increasing/ adapting analgesia

12- 17

NRS < 4 NISS ≤ 2
Patient is comfortable

10 – 12

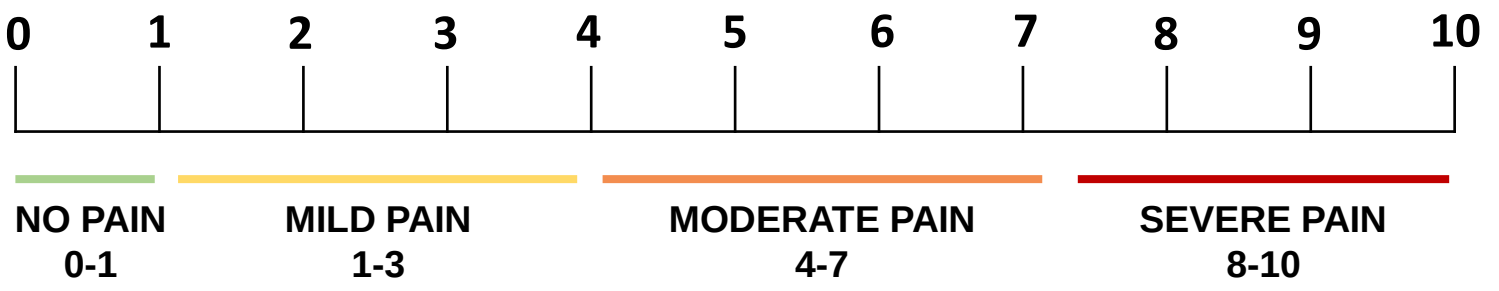
NRS < 4 NISS ≥ 2
Consider Weaning Sedation

< 10

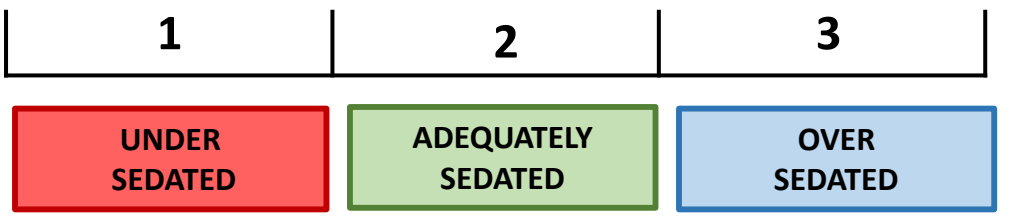
Patient is **OVER SEDATED**
Wean Sedation

Nurse Reported Scale

Nurse reported pain score, can be replaced with appropriate alternative validated pain score e.g. FLACCS, FACES, CRIES, Patient Reported Score.



Nurse Interpreted Score for Sedation



Nurse interpreted level of sedation takes into account the bedside nurse expertise and normal behaviour or mannerisms as reported by parents/ guardians. Allows for interpretation to include emotional and neurodevelopmental factors.

Comfort B POSTER v3.0 FINAL 3rd Dec 2018

COMFORT Behavioural Score Titration Guide

First assess the COMFORT B Score then assess the NRS and the NISS.

COMFORT Behavioural Score

>17

NRS < 4 NISS < 2 Issue is SEDATION
If the NRS is less than 4 it indicates the high score is related to UNDER-SEDATION. Seek advice about increasing sedative agents.

NRS > 4 NISS ≥ 2 Issue is PAIN
If the NRS is more than 4 and the NISS is more than or equal to 2, it indicates the high score is related to PAIN. Seek advice about increasing the analgesia

12- 17

NRS < 4 NISS ≤ 2 Patient is comfortable
The patient is comfortable with adequate analgesia and/ or sedation.

10 – 12

NRS < 4 NISS ≥ 2 Consider Weaning Sedation
NRS of less than 4 and a NISS of more than or equal to 2, the patient is a little too sedate. Seek advice about considering a reduction in sedation and/or analgesia

< 10

Patient is OVER SEDATED Wean Sedation
COMFORT Behavioural Score of 10 or less this indicates the patient is over-sedated and requires the sedation and/or analgesia to be actively reduced

Nurse Reported Scale (0 – 10) (NRS Pain Score)

- By utilising a pain score in combination with a COMFORT Behavioural Score the interpreter can more accurately determine if the high score is in relation to pain or under-sedation
- A high COMFORT B Score can indicate pain, or can indicate distress as a result of behavioural factors- anxiety, separation from parents, confusion or grief. A knowledge of the child's baseline behaviours will assist in differentiating potential causes of high COMFORT B Scores.
- NRS score can be replaced with appropriate alternative validated pain score e.g. FLACCS, FACES, CRIES, Patient Reported Score.

If the NRS is reported as 4 or more this is indicative of a sufficient level of pain that a pharmacological or non-pharmacological intervention should be initiated

Non-pharmacological methods of pain relief and comfort must always be considered in combination with pharmacological methods

Nurse Interpreted Score for Sedation (0 – 3) (NISS)

- The most up to date version of the COMFORT B Score advocates the use of a NISS
- The NISS is designed and validated for use as an adjunct to the COMFORT B Scoring, NOT suitable for use on it's own.
- Takes into account the bedside nurse expertise in combination with the normal behavioural mannerisms as reported by family members.
- The NISS allows the bedside nurse to interpret and classify the patients' level of sedation while accounting for emotional and neurodevelopmental factors to identify if the patient's sedation should continue unchanged, be reduced or be increased

SCENARIO 1: COMFORT B score 20 - Should indicate under-sedation requiring an INCREASE in sedation
Patient known to have movement disorder & nurse aware he waves his arms repeatedly when happy, significantly increasing COMFORT B score.
Patient allocated NISS 2 - no increase in sedation necessary as patient is comfortable

SCENARIO 2: COMFORT B score 9 - Should indicate over-sedation requiring an DECREASE in sedation and/ or analgesia
Nurse aware parents have reported their child becomes very still and quiet when in pain or distressed.
Patient allocated NISS 1 - sedation and/or analgesia adapted to provide comfort

Comfort B POSTER v3.0 FINAL 3rd Dec 2018

COMFORT Behavioural Score Titration Guide

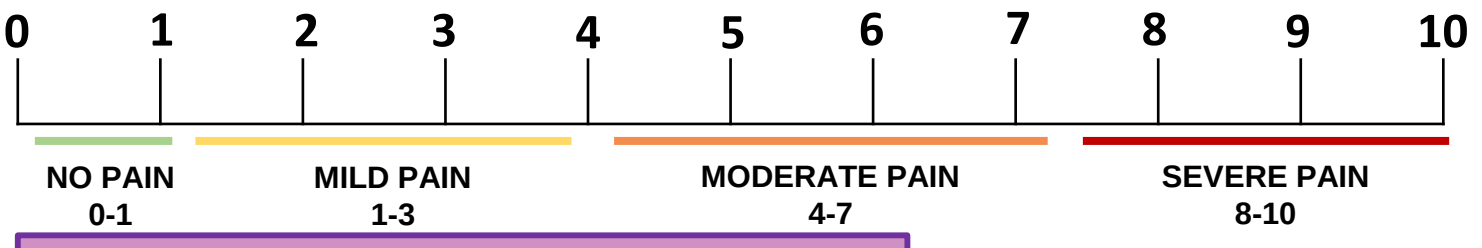
COMFORT Behavioural Score

>17	FLACCS < 4 NISS < 2 **Issue is SEDATION** Consider increasing/ adapting Sedation
>17	FLACCS > 4 NISS ≥ 2 **Issue is PAIN** Consider increasing/ adapting analgesia
12- 17	FLACCS < 4 NISS ≤ 2 **Patient is comfortable**
10 – 12	FLACCS < 4 NISS ≥ 2 **Consider Weaning Sedation**
< 10	Patient is **OVER SEDATED** Wean Sedation

FLACCS Pain Score (0-10)

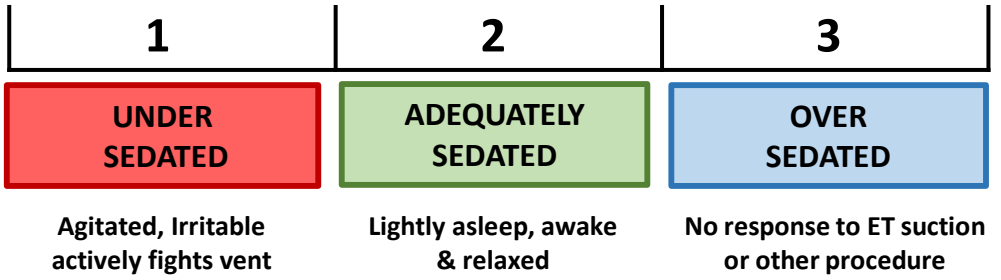
Pain score, can be replaced with appropriate alternative validated pain score e.g. FACES, CRIES, Patient Reported Score.
FLACCS of 4 or more is sufficient pain level to require intervention.

RESPONSE	SCORE 0	SCORE 1	SCORE 2
FACE	No particular expression or smile	Occasional grimace or frown, withdrawn, uninterested	Frequent to constant quivering chin, clenched jaw
LEGS	Normal position or relaxed	Uneasy, restless, tense	Kicking, or legs drawn up
ACTIVITY	Lying quietly, normal position, moves easily	Squirming, Shifting, back and forth, tense	Arched, rigid or jerking
CRY	No cry (awake or asleep)	Moans or whimpers, occasional complaint	Crying steadily, screams or sobs, frequent complaints
CONSOLABILITY	Content, relaxed	Reassured by occasional touch, hug or being talked to- Distractible	Difficult to console or comfort



(Merkel et al. 1997)

Nurse Interpreted Score for Sedation



Nurse interpreted level of sedation takes into account the bedside nurse expertise and normal behaviour or mannerisms as reported by parents/ guardians. Allows for interpretation to include emotional and neurodevelopmental factors.

COMFORT Behavioural Score Titration Guide

First assess the COMFORT B Score then assess the FLACCS and the NISS.

COMFORT Behavioural Score

>17

FLACCS < 4 NISS < 2 Issue is SEDATION
If the FLACCS is less than 4 it indicates the high score is related to UNDER-SEDATION. Seek advice about increasing sedative agents.

FLACCS > 4 NISS ≥ 2 Issue is PAIN
If the FLACCS is more than 4 and the NISS is more than or equal to 2, it indicates the high score is related to PAIN. Seek advice about increasing the analgesia

12- 17

FLACCS < 4 NISS ≤ 2 Patient is comfortable
The patient is comfortable with adequate analgesia and/ or sedation.

10 – 12

FLACCS < 4 NISS ≥ 2 Consider Weaning Sedation
FLACCS of less than 4 and a NISS of more than or equal to 2, the patient is a little too sedate. Seek advice about considering a reduction in sedation and/or analgesia

< 10

Patient is OVER SEDATED Wean Sedation
COMFORT Behavioural Score of 10 or less this indicates the patient is over-sedated and requires the sedation and/or analgesia to be actively reduced

FLACCS Pain Score (0 – 10)

- **By utilising a pain score in combination with a COMFORT Behavioural Score the interpreter can more accurately determine if the high score is in relation to pain or under-sedation**
- **A high COMFORT B Score can indicate pain, or can indicate distress as a result of behavioural factors- anxiety, separation from parents, confusion or grief. A knowledge of the child's baseline behaviours will assist in differentiating potential causes of high COMFORT B Scores.**
- **FLACCS score can be replaced with any appropriate alternative validated pain score e.g. NRS, FACES, CRIES, Patient Reported Score.**

If the FLACCS is reported as 4 or more this is indicative of a sufficient level of pain that a pharmacological or non-pharmacological intervention should be initiated

Non-pharmacological methods of pain relief and comfort must always be considered in combination with pharmacological methods

Nurse Interpreted Score for Sedation (0 – 3) (NISS)

- **The most up to date version of the COMFORT B Score advocates the use of a NISS**
- **The NISS is designed and validated for use as an <u>adjunct</u> to the COMFORT B Scoring, NOT suitable for use on it's own.**
- **Takes into account the bedside nurse expertise in combination with the normal behavioural mannerisms as reported by family members.**
- **The NISS allows the bedside nurse to interpret and classify the patients' level of sedation while accounting for emotional and neurodevelopmental factors to identify if the patient's sedation should continue unchanged, be reduced or be increased**

SCENARIO 1: COMFORT B score 20 - Should indicate under-sedation requiring an INCREASE in sedation
Patient known to have movement disorder & nurse aware he waves his arms repeatedly when happy, significantly increasing COMFORT B score.
Patient allocated NISS 2 - no increase in sedation necessary as patient is comfortable

SCENARIO 2: COMFORT B score 9 - Should indicate over-sedation requiring an DECREASE in sedation and/ or analgesia
Nurse aware parents have reported their child becomes very still and quiet when in pain or distressed.
Patient allocated NISS 1 - sedation and/or analgesia adapted to provide comfort

Comfort B FLACCS POSTER v3.0 FINAL 3rd December 2018

COMFORT Behavioural Score Titration Guide

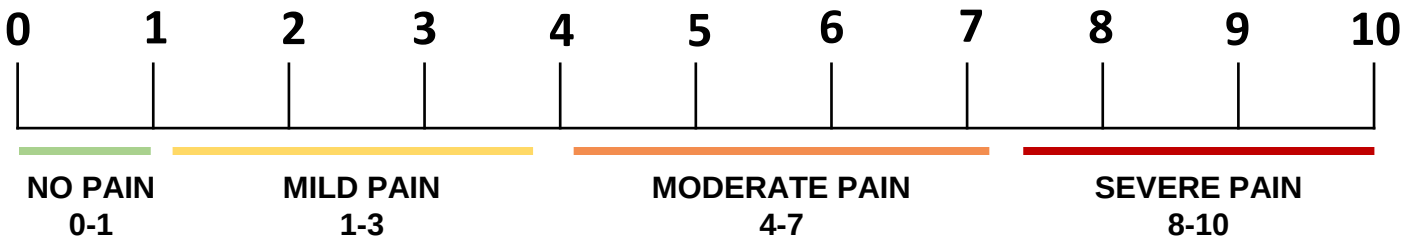
COMFORT Behavioural Score

>17	AHTPS < 4 NISS < 2 **Issue is SEDATION** Consider increasing/ adapting Sedation
>17	AHTPS > 4 NISS ≥ 2 **Issue is PAIN** Consider increasing/ adapting analgesia
12- 17	AHTPS < 4 NISS ≤ 2 **Patient is comfortable**
10 – 12	AHTPS < 4 NISS ≥ 2 **Consider Weaning Sedation**
< 10	Patient is **OVER SEDATED** Wean Sedation

Alder Hey Triage Pain Score (0-10)

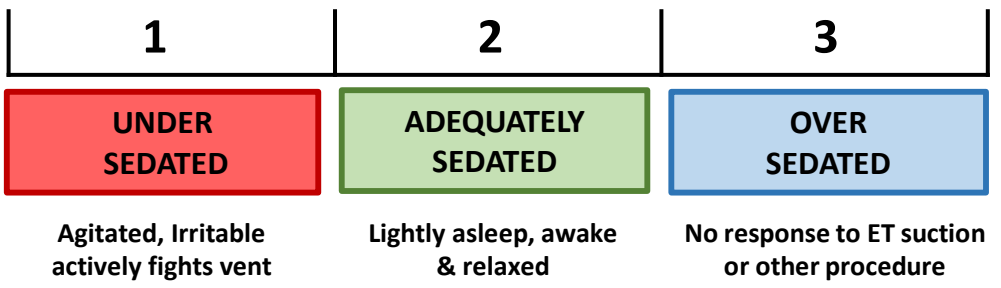
Pain score, can be replaced with appropriate alternative validated pain score e.g. FACES, CRIES, Patient Reported Score. AHTPS of 4 or more is sufficient pain level to require intervention.

RESPONSE	SCORE 0	SCORE 1	SCORE 2
Cry / Voice	No complaint/ no cry	Consolable/ Not talking/ negative	Inconsolable/complaining of pain
Facial Expression	Normal	Short grimace <50% of time	Long Grimace >50% of time
Posture	Normal	Touching, rubbing, sparing	Defensive/Tense/ rigid/ arched
Movement	Normal	Reduced or restless	Immobile or Thrashing
Colour	Normal	Pale	Very Pale/ Green/Grey



(Stewart et al. 1995)

Nurse Interpreted Score for Sedation



Nurse interpreted level of sedation takes into account the bedside nurse expertise and normal behaviour or mannerisms as reported by parents/ guardians. Allows for interpretation to include emotional and neurodevelopmental factors.

COMFORT Behavioural Score Titration Guide

First assess the COMFORT B Score then assess the FLACCS and the NISS.

COMFORT Behavioural Score

>17

AHTPS < 4 NISS < 2 Issue is SEDATION
If the AHTPS is less than 4 and the NISS is less than 2 it indicates the high score is related to UNDER-SEDATION. Seek advice about increasing the sedation

AHTPS > 4 NISS ≥ 2 Issue is PAIN
If the AHTPS is greater than 4 it indicates the high score is related to PAIN. Seek advice about increasing analgesia

12- 17

AHTPS < 4 NISS ≤ 2 Patient is comfortable
The patient is comfortable with adequate analgesia and/ or sedation.

10 – 12

AHTPS < 4 NISS ≥ 2 Consider Weaning Sedation
AHTPS of less than 4 and a NISS of more than or equal to 2, the patient is a little too sedate. Seek advice about considering a reduction in sedation and/or analgesia

< 10

Patient is OVER SEDATED Wean Sedation
COMFORT Behavioural Score of 10 or less this indicates the patient is over-sedated and requires the sedation and/or analgesia to be actively reduced

Alder Hey Triage Pain Score (0 – 10)

- **By utilising a pain score in combination with a COMFORT Behavioural Score the interpreter can more accurately determine if the high score is in relation to pain or under-sedation**
- **A high COMFORT B Score can indicate pain, or can indicate distress as a result of behavioural factors- anxiety, separation from parents, confusion or grief. A knowledge of the child's baseline behaviours will assist in differentiating potential causes of high COMFORT B Scores.**
- **AHTPS score can be replaced with any appropriate alternative validated pain score e.g. FLACCS, FACES, CRIES, Patient Reported Score.**

If the AHTPS is reported as 4 or more this is indicative of a sufficient level of pain that a pharmacological or non-pharmacological intervention should be initiated

Non-pharmacological methods of pain relief and comfort must always be considered in combination with pharmacological methods

Nurse Interpreted Score for Sedation (0 – 3) (NISS)

- **The most up to date version of the COMFORT B Score advocates the use of a NISS**
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- **Takes into account the bedside nurse expertise in combination with the normal behavioural mannerisms as reported by family members.**
- **The NISS allows the bedside nurse to interpret and classify the patients' level of sedation while accounting for emotional and neurodevelopmental factors to identify if the patient's sedation should continue unchanged, be reduced or be increased**

SCENARIO 1: COMFORT B score 20 - Should indicate under-sedation requiring an INCREASE in sedation
Patient known to have movement disorder & nurse aware he waves his arms repeatedly when happy, significantly increasing COMFORT B score.
Patient allocated NISS 2 - no increase in sedation necessary as patient is comfortable

SCENARIO 2: COMFORT B score 9 - Should indicate over-sedation requiring an DECREASE in sedation and/ or analgesia
Nurse aware parents have reported their child becomes very still and quiet when in pain or distressed.
Patient allocated NISS 1 - sedation and/or analgesia adapted to provide comfort

Comfort B AHTPS POSTER v1.0 FINAL 3rd Dec 2018

COMFORT Behavioural Score Titration Guide

COMFORT Behavioural Score

>17	FACES < 4 NISS < 2 **Issue is SEDATION** Consider increasing/ adapting Sedation
>17	FACES > 4 NISS ≥ 2 **Issue is PAIN** Consider increasing/ adapting analgesia
12- 17	FACES < 4 NISS ≤ 2 **Patient is comfortable**
10 – 12	FACES < 4 NISS ≥ 2 **Consider Weaning Sedation**
< 10	Patient is **OVER SEDATED** Wean Sedation

FACES Pain Score (0-10)

Faces pain score is suitable for children 3years and over who can self report their pain. Point to each face describing the pain intensity then ask the child to point to the face that best describes their pain.
FACES of 4 or more is sufficient pain level to require intervention.

(Wong & Baker, 1988)

0	2	4	6	8	10
No hurt	Hurts a little bit	Hurts a little more	Hurts even more	Hurts a lot	Worst hurt ever (Do not need to be crying to hurt this much)

Nurse Interpreted Score for Sedation

1	2	3
UNDER SEDATED	ADEQUATELY SEDATED	OVER SEDATED
Agitated, Irritable actively fights vent	Lightly asleep, awake & relaxed	No response to ET suction or other procedure

Nurse interpreted level of sedation takes into account the bedside nurse expertise and normal behaviour or mannerisms as reported by parents/ guardians. Allows for interpretation to include emotional and neurodevelopmental factors.

COMFORT Behavioural Score Titration Guide

First assess the COMFORT B Score then assess the pain score and the NISS.

COMFORT Behavioural Score

>17

FACES < 4 NISS < 2 Issue is SEDATION
If the FACES is less than 4 and the NISS is less than 2 it indicates the high score is related to UNDER-SEDATION. Seek advice about increasing the sedation

FACES > 4 NISS ≥ 2 Issue is PAIN
If the FACES is greater than 4 it indicates the high score is related to PAIN. Seek advice about increasing analgesia

12- 17

FACES < 4 NISS ≤ 2 Patient is comfortable
The patient is comfortable with adequate analgesia and/ or sedation.

10 – 12

FACES < 4 NISS ≥ 2 Consider Weaning Sedation
FACES of less than 4 and a NISS of more than or equal to 2, the patient is a little too sedate. Seek advice about considering a reduction in sedation and/or analgesia

≤ 10

Patient is OVER SEDATED Wean Sedation
COMFORT Behavioural Score of 10 or less this indicates the patient is over-sedated and requires the sedation and/or analgesia to be actively reduced

FACES Pain Score (0 – 10)

Faces pain score is suitable for children 3years and over who can self report their pain. Point to each face describing the pain intensity then ask the child to point to the face that best describes their pain.

FACES of 4 or more is sufficient pain level to require intervention.

By utilising a pain score in combination with a COMFORT Behavioural Score the interpreter can more accurately determine if the high score is in relation to pain or under-sedation

A high COMFORT Score can indicate pain, or can indicate distress as a result of behavioural factors- anxiety, separation from parents, confusion or grief. A knowledge of the child's baseline behaviours will assist in distinguishing causes of high COMFORT B Scores.

If the FACES is reported as 4 or more this is indicative of a sufficient level of pain that a pharmacological or non-pharmacological intervention should be initiated. Non-pharmacological methods of pain relief and comfort must always be considered in combination with pharmacological methods

Nurse Interpreted Score for Sedation (0 – 3) (NISS)

The NISS is designed and validated for use as an <u>adjunct</u> to the COMFORT B Scoring, NOT suitable for use on it's own.

Takes into account the bedside nurse expertise in combination with the normal behavioural mannerisms as reported by family members.

The NISS allows the bedside nurse to interpret and classify the patients' level of sedation while accounting for emotional and neurodevelopmental factors to identify if the patient's sedation should continue unchanged, be reduced or be increased

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Patient allocated NISS 1 - sedation and/or analgesia adapted to provide comfort

COMFORT Behavioural Score Titration Guide

COMFORT Behavioural Score

>17

CRIES < 4 NISS < 2 **Issue is SEDATION**
Consider increasing/ adapting Sedation

CRIES > 4 NISS ≥ 2 **Issue is PAIN**
Consider increasing/ adapting analgesia

12- 17

CRIES < 4 NISS ≤ 2
Patient is comfortable

10 – 12

CRIES < 4 NISS ≥ 2
Consider Weaning Sedation

< 10

Patient is **OVER SEDATED**
Wean Sedation

CRIES Pain Score (0-10)

Pain score, can be replaced with appropriate alternative validated pain score e.g. FACES, FLACCS, Patient Reported Score.
CRIES of 4 or more is sufficient pain level to require intervention.

RESPONSE	SCORE 0	SCORE 1	SCORE 2
Cry	No cry or cry which is not high pitched	High pitched cry but consolable	High pitched cry and inconsolable
Requires 0_2 to maintain SaO_2 >95%	No	Requiring O_2 <30%	Requiring O_2 >30%
Increased vital signs	Heart rate & blood pressure +/- 10% baseline	10-20% increase in heart rate or blood pressure	>20% increase in heart rate or blood pressure
Expression	Neutral	Grimace	Grimace / grunt
Sleeplessness	No	Wakes frequently	Constantly awake

(Krechel & Bildner, 1995)

Nurse Interpreted Score for Sedation

1	2	3
UNDER SEDATED	ADEQUATELY SEDATED	OVER SEDATED
Agitated, Irritable actively fights vent	Lightly asleep, awake & relaxed	No response to ET suction or other procedure

Nurse interpreted level of sedation takes into account the bedside nurse expertise and normal behaviour or mannerisms as reported by parents/ guardians. Allows for interpretation to include emotional and neurodevelopmental factors.

COMFORT Behavioural Score Titration Guide

First assess the COMFORT B Score then assess the pain score and the NISS.

COMFORT Behavioural Score

>17

CRIES < 4 NISS < 2 Issue is SEDATION
If the CRIES is less than 4 and the NISS is less than 2 it indicates the high score is related to UNDER-SEDATION. Seek advice about increasing the sedation

CRIES > 4 NISS ≥ 2 Issue is PAIN
If the CRIES is greater than 4 it indicates the high score is related to PAIN. Seek advice about increasing analgesia

12- 17

CRIES < 4 NISS ≤ 2 Patient is comfortable
The patient is comfortable with adequate analgesia and/ or sedation.

10 – 12

CRIES < 4 NISS ≥ 2 Consider Weaning Sedation
CRIES of less than 4 and a NISS of more than or equal to 2, the patient is a little too sedate. Seek advice about considering a reduction in sedation and/or analgesia

< 10

Patient is OVER SEDATED Wean Sedation
COMFORT Behavioural Score of 10 or less this indicates the patient is over-sedated and requires the sedation and/or analgesia to be actively reduced

CRIES Pain Score (0 – 10)

CRY CHARACTERISTIC- Pain related cry is high pitched
REQUIRES OXYGEN- Consider other causes pneumothorax, over-sedation
BLOOD PRESSURE- Assess BP last to prevent upsetting the infant causing difficulty with other areas of assessment
EXPRESSION- Grimace characterised by brow bulge, eyes shut, deepened naso-labial furrow, mouth open
SLEEPLESSNESS- Based on infants state in the hour preceding assessment

By utilising a pain score in combination with a COMFORT Behavioural Score the interpreter can more accurately determine if the high score is in relation to pain or under-sedation

A high COMFORT Score can indicate pain, or can indicate distress as a result of behavioural factors- anxiety, separation from parents, confusion or grief. A knowledge of the child's baseline behaviours will assist in distinguishing causes of high COMFORT B Scores.

If the CRIES score is reported as 4 or more this is indicative of a sufficient level of pain that a pharmacological or non-pharmacological intervention should be initiated. Non-pharmacological methods of pain relief and comfort must always be considered in combination with pharmacological methods

Nurse Interpreted Score for Sedation (0 – 3) (NISS)

The NISS is designed and validated for use as an <u>adjunct</u> to the COMFORT B Scoring, NOT suitable for use on it's own.

Takes into account the bedside nurse expertise in combination with the normal behavioural mannerisms as reported by family members.

The NISS allows the bedside nurse to interpret and classify the patients' level of sedation while accounting for emotional and neurodevelopmental factors to identify if the patient's sedation should continue unchanged, be reduced or be increased

SCENARIO 1: COMFORT B score 20 - Should indicate under-sedation requiring an INCREASE in sedation
Patient known to have movement disorder & nurse aware he waves his arms repeatedly when happy, significantly increasing COMFORT B score.
Patient allocated NISS 2 - no increase in sedation necessary as patient is comfortable

SCENARIO 2: COMFORT B score 9 - Should indicate over-sedation requiring an DECREASE in sedation and/ or analgesia
Nurse aware parents have reported their child becomes very still and quiet when in pain or distressed.
Patient allocated NISS 1 - sedation and/or analgesia adapted to provide comfort

COMFORT Behavioural Score Titration Guide

COMFORT Behavioural Score 0-30

>17	**NIPS ≤ 2 NISS < 2 Issue is SEDATION** Consider increasing/ adapting Sedation
	NIPS ≥ 2 NISS ≥ 2 Issue is PAIN Consider increasing/ adapting analgesia
12- 17	**NIPS ≤ 2 NISS ≤ 2** **Patient is comfortable**
10 – 12	**NIPS ≤ 2 NISS ≥ 2** **Consider Weaning Sedation**
< 10	Patient is **OVER SEDATED** Wean Sedation

NIPS Pain Score 0-7

NIPS score can be replaced with appropriate alternative validated pain score e.g. FLACCS, FACES, CRIES, NRS, Patient Reported Score.

Facial Expression	0- Relaxed (restful, neutral expression)	**Arms**	0- Relaxed (no random movements or rigidity)
	1- Grimace, furrowed brow, chin, jaw		1- Flexed/extended (tense straight arms, rigid &/or rapid extension)
Cry	0- No cry, quiet not crying	**Legs**	0- Relaxed (no random movements or rigidity)
	1- Whimper (mild moaning or intermittent)		1- Flexed/extended (tense straight arms, rigid &/or rapid extension)
	2- Vigorous cry (loud scream, shrill continuous)	**State of Arousal**	0- Sleeping/awake (quiet, peaceful, settled)
	2- Silent cry (based on facial movements if intubated)		1- Fussy (alert, restless & thrashing)
Breathing Pattern	0- Relaxed (usual pattern for infant)	**TOTAL SCORE:**	***Out of a maximum score of 7***
	1- Change in breathing (irregular, increased, gagging, breath holding)		

1	2	3	4	5	6	7
NO PAIN	MILD PAIN	MODERATE PAIN		SEVERE PAIN		

Nurse Interpreted Score for Sedation

1	2	3
UNDER SEDATED	**ADEQUATELY SEDATED**	**OVER SEDATED**
Agitated, Irritable actively fights vent	Lightly asleep, awake & relaxed	No response to ET suction or other procedure

Nurse interpreted level of sedation takes into account the bedside nurse expertise and normal behaviour or mannerisms as reported by parents/ guardians. Allows for interpretation to include emotional and neurodevelopmental factors.

COMFORT Behavioural Score Titration Guide

First assess the COMFORT Behavioural Score then assess the pain score

COMFORT Behavioural Score 0-30

>17

NIPS ≤ 2 NISS < 2 Issue is SEDATION
If the NIPS is less than or equal to 2 and NISS less than 2 it indicates the high COMFORT Behavioural score is related to UNDER-SEDATION.
Seek advice about **increasing the sedation**

NIPS ≥ 2 NISS ≥ 2 Issue is PAIN
If the NIPS is 2 or more and the NISS more than or equal to 2 it indicates the high COMFORT Behavioural score is related to PAIN.
Seek advice about **increasing the analgesia**

12-17

NIPS ≤ 2 NISS ≤ 2 Patient is comfortable
The patient is comfortable with adequate analgesia and/ or sedation

10-12

NIPS ≤ 2 NISS ≥ 2 Consider Weaning Sedation
NIPS of less than or equal to 2 and a NISS of 2 or more the patient is a little too sedate. Seek advice about considering a **reduction in sedation and/or analgesia**

< 10

Patient is **OVER SEDATED Wean Sedation**
COMFORT Behavioural Score of 13 or less this indicates the patient is over-sedated and requires the **sedation and/or analgesia to be actively reduced**

NIPS Pain Score (0 – 7)

NIPS score can be replaced with appropriate alternative validated pain score e.g. FLACCS, FACES, CRIES, NRS, Patient Reported Score

0-1	NO PAIN	- Continue nursing comfort measures
2	MILD PAIN	- Continue nursing comfort measures
3-4	MODERATE PAIN	- Continue nursing comfort measures & paracetamol
>4	SEVERE PAIN	- Continue nursing comfort measures, paracetamol, opioid, adjust dose of analgesia

By utilising a pain score in combination with a COMFORT Behavioural Score the interpreter can more accurately determine if the high COMFORT score is in relation to pain or in relation to under-sedation.

Nurse Interpreted Score for Sedation (0 – 3) (NISS)

- **The NISS is designed and validated for use as an <u>adjunct</u> to the COMFORT B Scoring, NOT suitable for use on it's own.**
- **Takes into account the bedside nurse expertise in combination with the normal behavioural mannerisms as reported by family members.**
- **The NISS allows the bedside nurse to interpret and classify the patients' level of sedation while accounting for emotional and neurodevelopmental factors to identify if the patient's sedation should continue unchanged, be reduced or be increased**

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