



What is scored? The COMFORT Original Score is a scoring system consisting of **6 behavioural** indicators and **2 physiological** measures scored following a **2 minute observation** period. The COMFORT Original Score was primarily developed and validated for assessing distress in pre-verbal (0-3years) intubated post-operative PICU patients

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

Who is it used for? The COMFORT Original Score has been validated for use in intubated & mechanically ventilated children

. **Who is it not suitable for?** Children who are on ***neuromuscular blocking agents*** cannot be assessed using the COMFORT Original Score as they are unable to display any of the behavioural cues used to assess COMFORT. The COMFORT Original Score is not suitable for assessing ***self-ventilating*** children.

Do not . . . assess a COMFORT Score within ***20minutes*** 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 & assess the patient's arm or leg muscle tone.



COMFORT Original 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	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?
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?
BP MAP	1-BP below baseline 2- BP consistently at baseline 3- Infrequent elevation of >15% (1-3 times) 4- Infrequent elevation of >15% (more than 3 times) 5- Sustained elevation of >15%	Note the patient's expected normal physiological MAP value. Calculate 15% increase & decrease to interpret changes blood pressure.
Heart Rate	1-HR below baseline 2- HR consistently at baseline 3- Infrequent elevation of >15% (1-3 times) 4- Infrequent elevation of >15% (more than 3 times) 5- Sustained elevation of >15%	Note the patient's expected normal physiological heart rate. Calculate 15% increase & decrease to interpret changes in heart rate.
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 <i>In cases of complex needs/CP/underlying neuromuscular condition assess with a parent for the 1st assessment.</i>	How does the patient's muscle tone compare to a normal awake & alert child of the same age/stage of development? Flex /extend limb.
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 O refresher ...

- **COMFORT O Scores** can be used to assess sedation & comfort in patients with complex needs. *When scoring each category ask yourself ‘what is normal for this child?’*

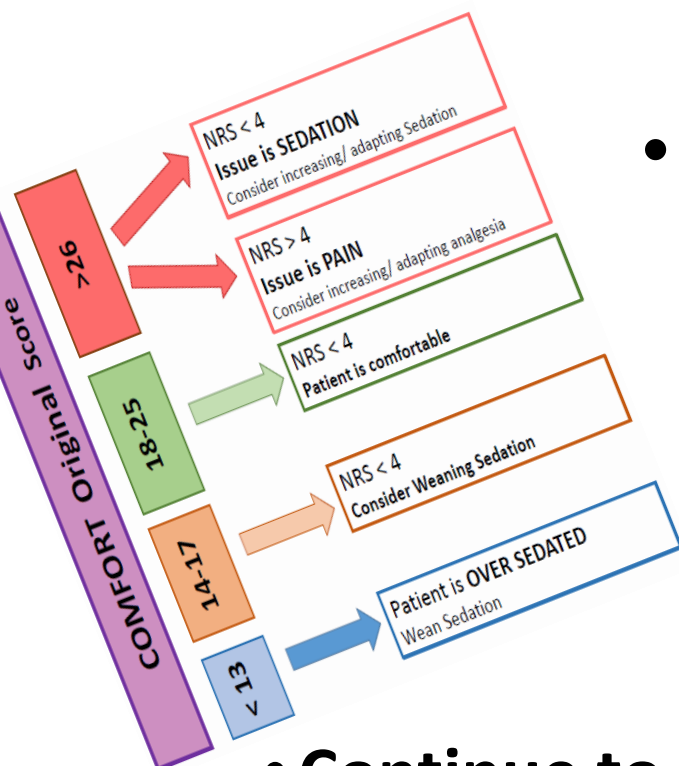
*Ask their parent **to tell you their normal!** A grimace could be their happy face.*



- **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 O 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 O 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**.

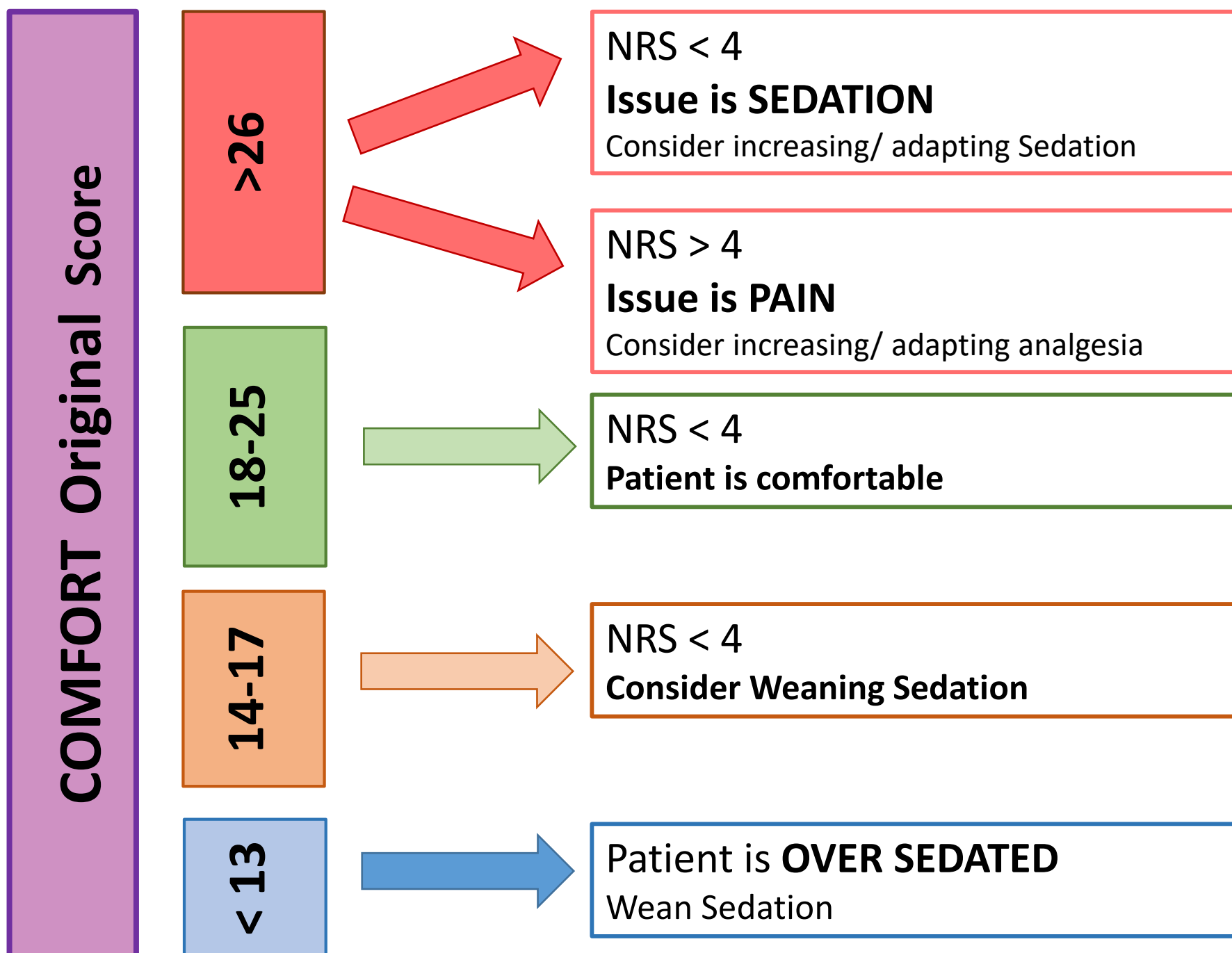
- **Continue to assess COMFORT O score until point of extubation** even if all sedative agents have been discontinued.

- Patients can safely extubate with a COMFORT O score of 18-25 (**green zone**)



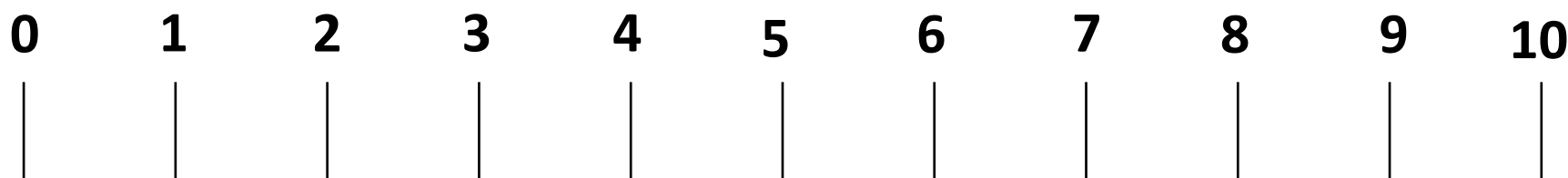


COMFORT Original Score Titration Guide



Nurse Reported Scale

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



NO PAIN
0-1

MILD PAIN
1-3

MODERATE PAIN
4-7

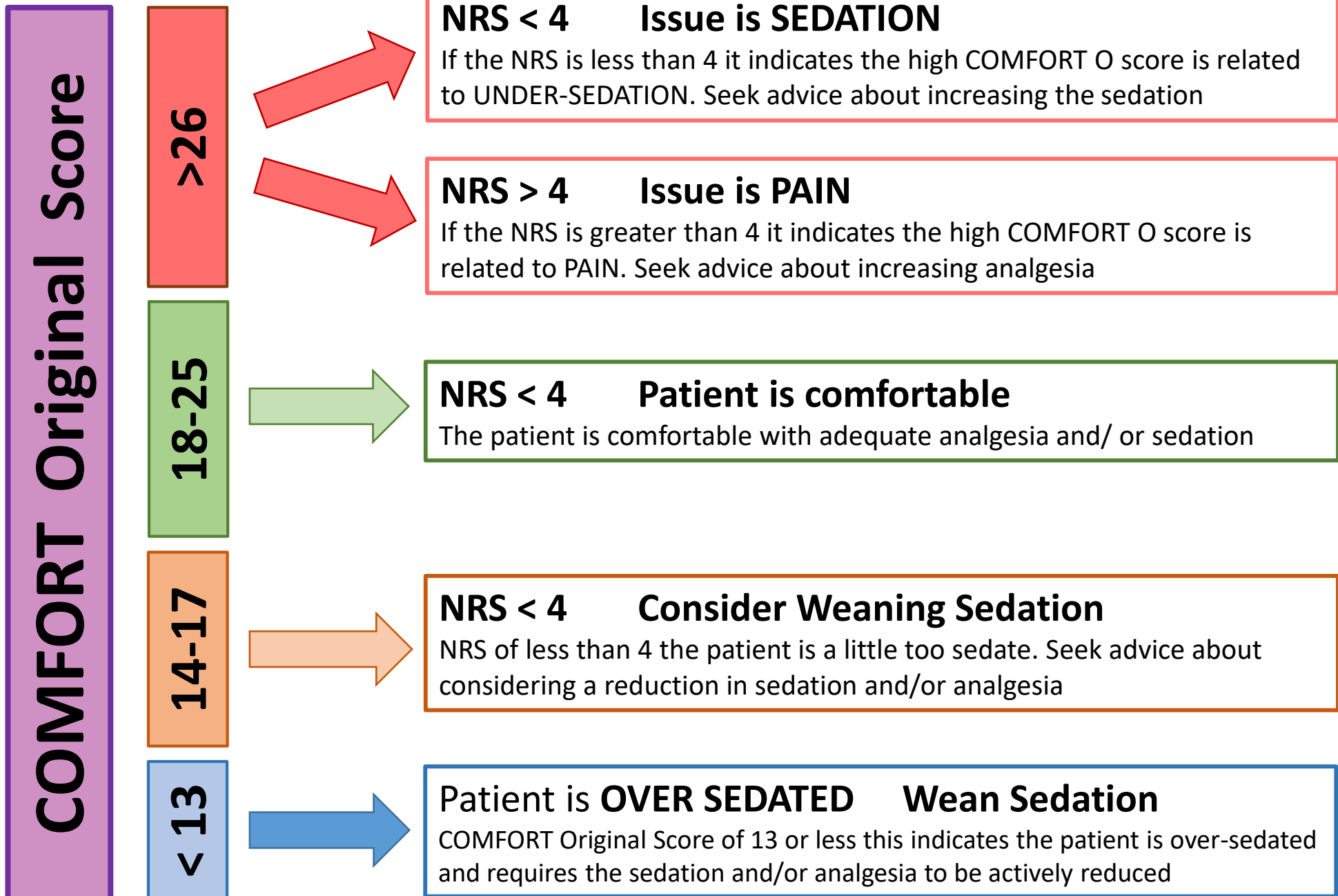
SEVERE PAIN
8-10



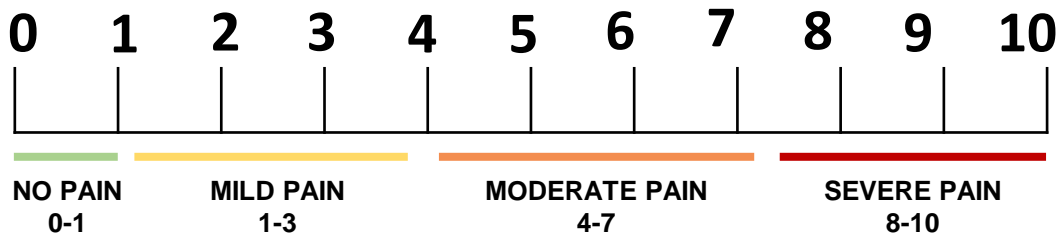
COMFORT Original Score Titration Guide



First assess the COMFORT Original Score then assess the pain score



Nurse Reported Score Pain Score (0 – 10)



The NRS is a 0-10 pain score reported by the bedside nurse caring for the child. The NRS takes into account the expertise of the bedside nurse, the normal behavioural mannerisms reported by parents/ guardians and emotional factors ongoing at the time of the assessment.

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

A high COMFORT Original 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 O Scores.

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

If a pain score is reported is 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



COMFORT Original Score

Titration Guide



COMFORT Original Score

> 26

18 - 25

14 - 17

< 13

FLACCS < 4

Issue is SEDATION

Consider increasing/ adapting Sedation

FLACCS > 4

Issue is PAIN

Consider increasing/ adapting analgesia

FLACCS < 4

Patient is comfortable

FLACCS < 4

Consider Weaning Sedation

Patient is **OVER SEDATED**

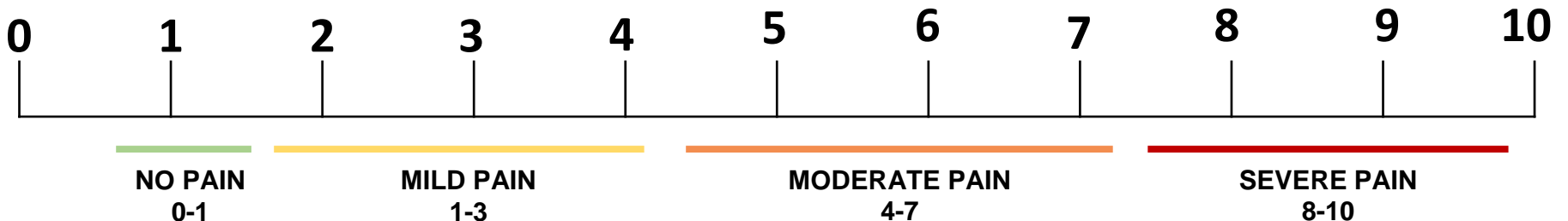
Wean Sedation

FLACCS Pain Score

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

(Merkel et al. 1997)

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

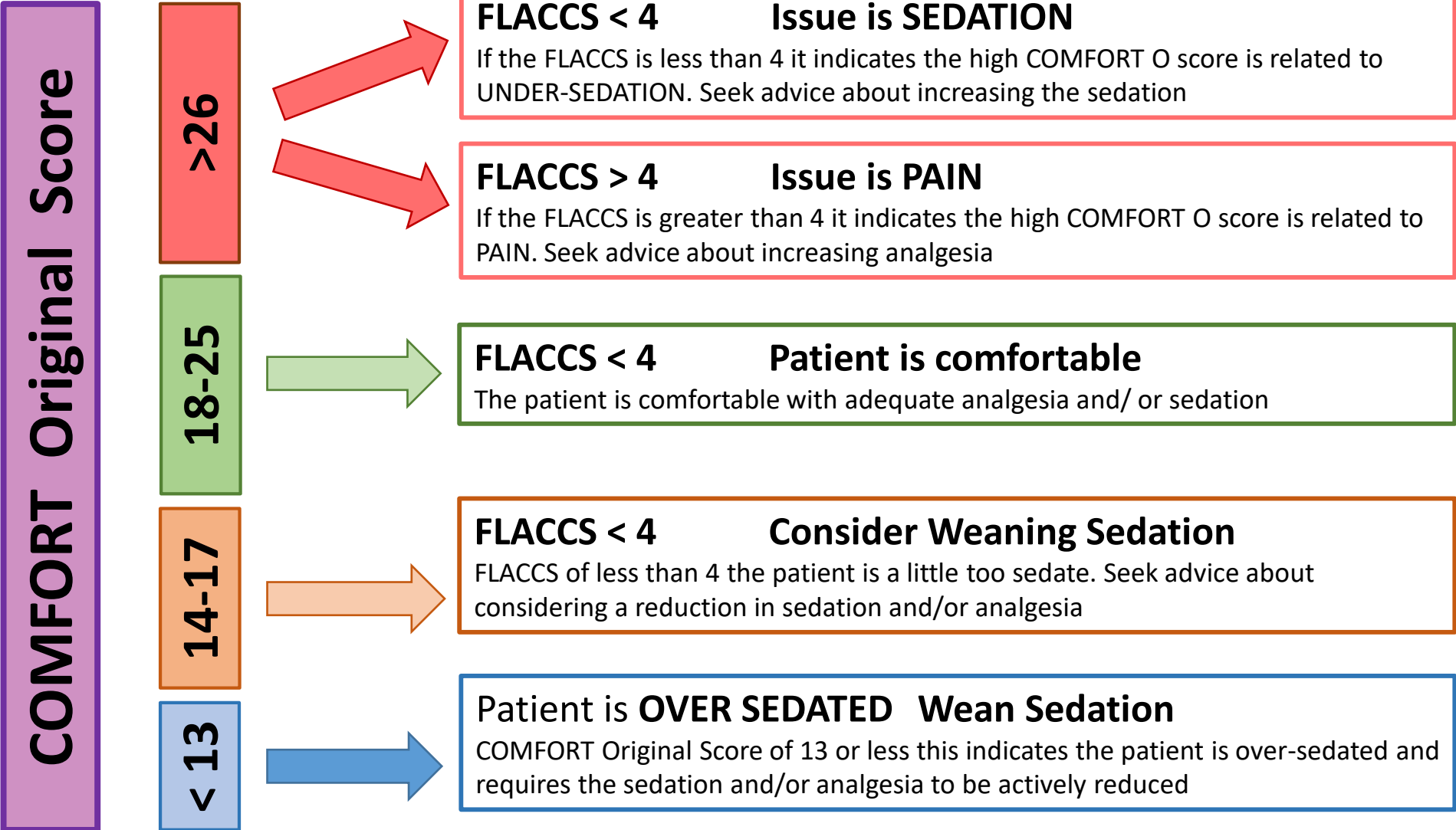




COMFORT Original Score Titration Guide



First assess the COMFORT Original Score then assess the pain score



FLACCS Pain Score (0 – 10)

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
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NO PAIN
0-1

MILD PAIN
1-3

MODERATE PAIN
4-7

SEVERE PAIN
8-10

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

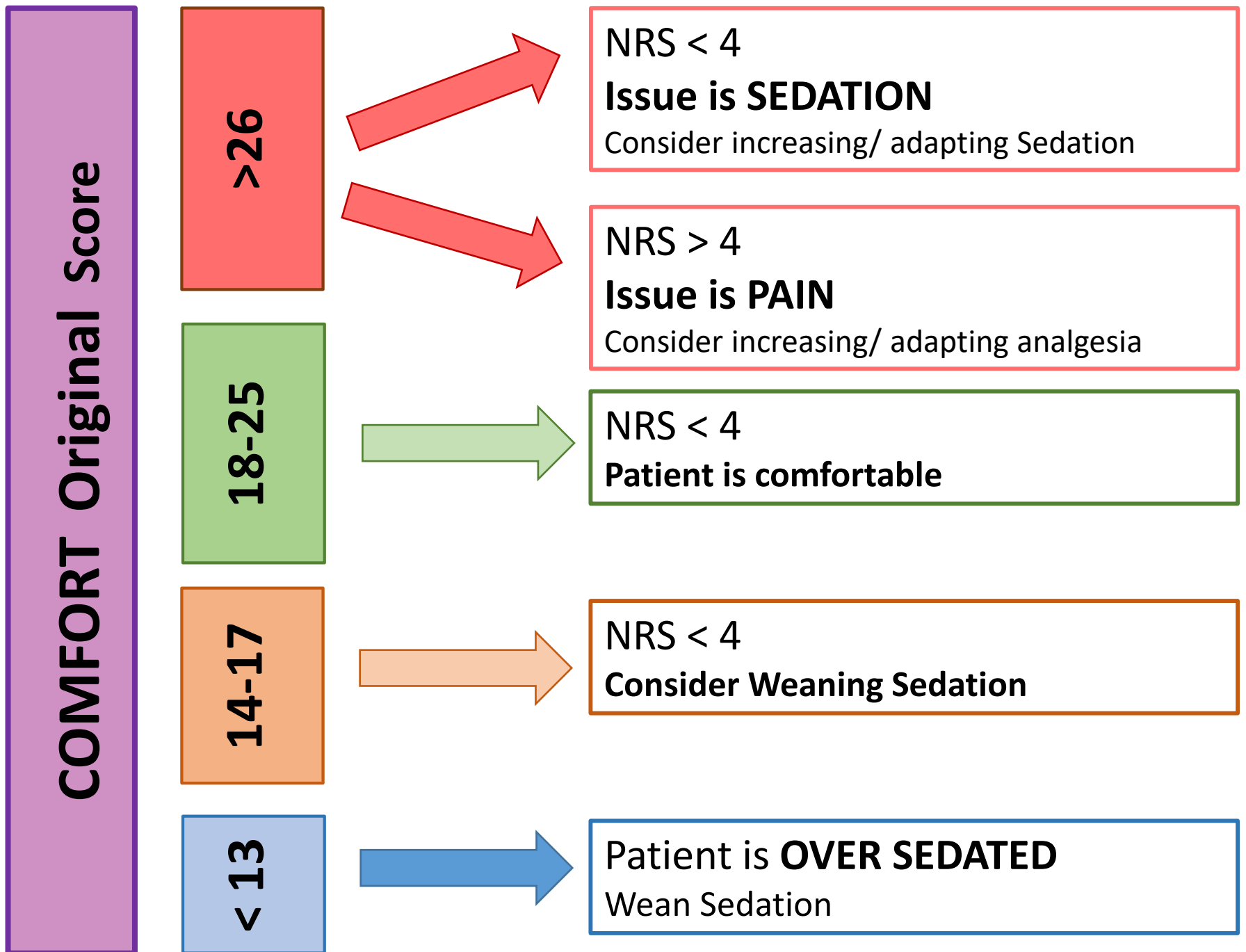
A high COMFORT Original Score can indicate pain, or can indicate distress as a result of behavioural factors- anxiety, separation from parents, confusion or grief. A knowledge of the child's baseline behaviours will assist in differentiating potential causes of high COMFORT O Scores.

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

If a pain score is reported is 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



COMFORT Original Score Titration Guide



FACES Pain Score (0-10)

(Wong & Baker, 1988)

Faces pain score is suitable for children 3 years 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.



0

No hurt

2

Hurts a
little bit

4

Hurts a
little more

6

Hurts even
more

8

Hurts
a lot

10

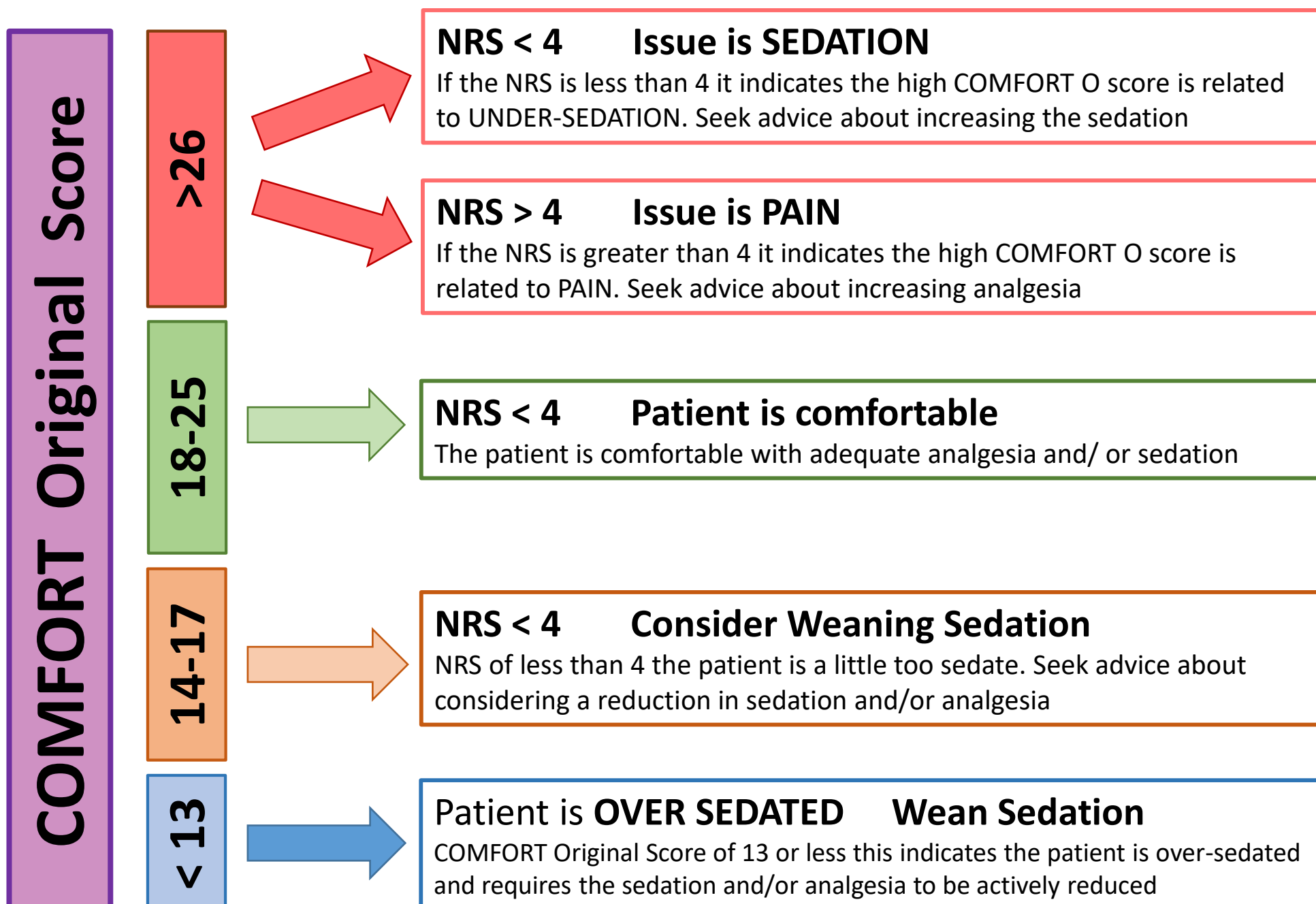
**Worst
hurt ever**
(Do not need to be crying
to hurt this much)



COMFORT Original Score Titration Guide



First assess the COMFORT Original Score then assess the pain score



FACES Pain Score

(0 – 10)

NO PAIN
0-1

MILD PAIN
1-3

MODERATE PAIN
4-7

SEVERE PAIN
8-10

Faces pain score is suitable for children 3 years 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

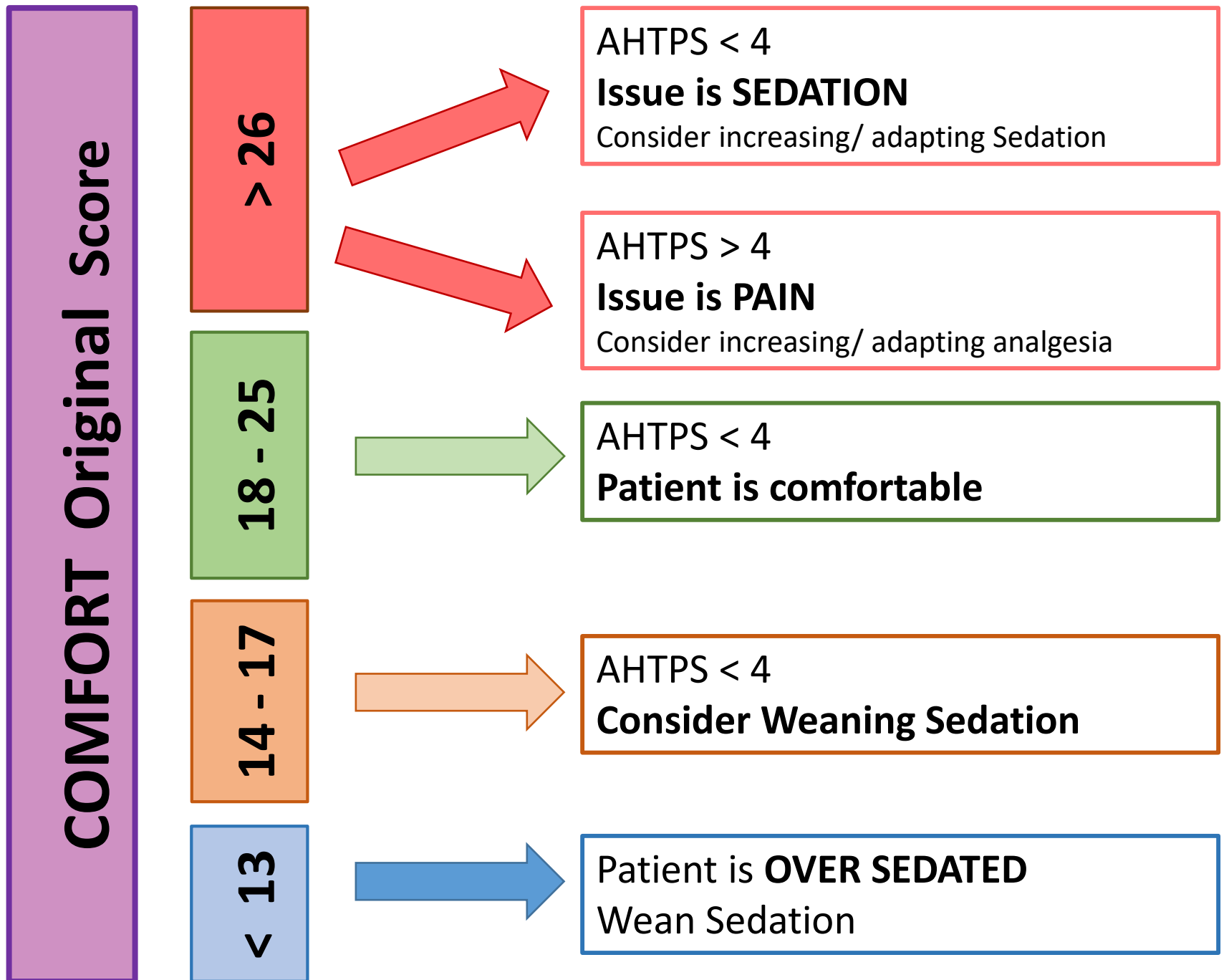
A high COMFORT Score can indicate pain, or can indicate distress as a result of behavioural factors- anxiety, separation from parents, confusion or grief. A knowledge of the child's baseline behaviours will assist in distinguishing causes of high COMFORT B Scores.

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



COMFORT Original Score

Titration Guide



Alder Hey Triage Pain Score

(Stewart et al. 1995)

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

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

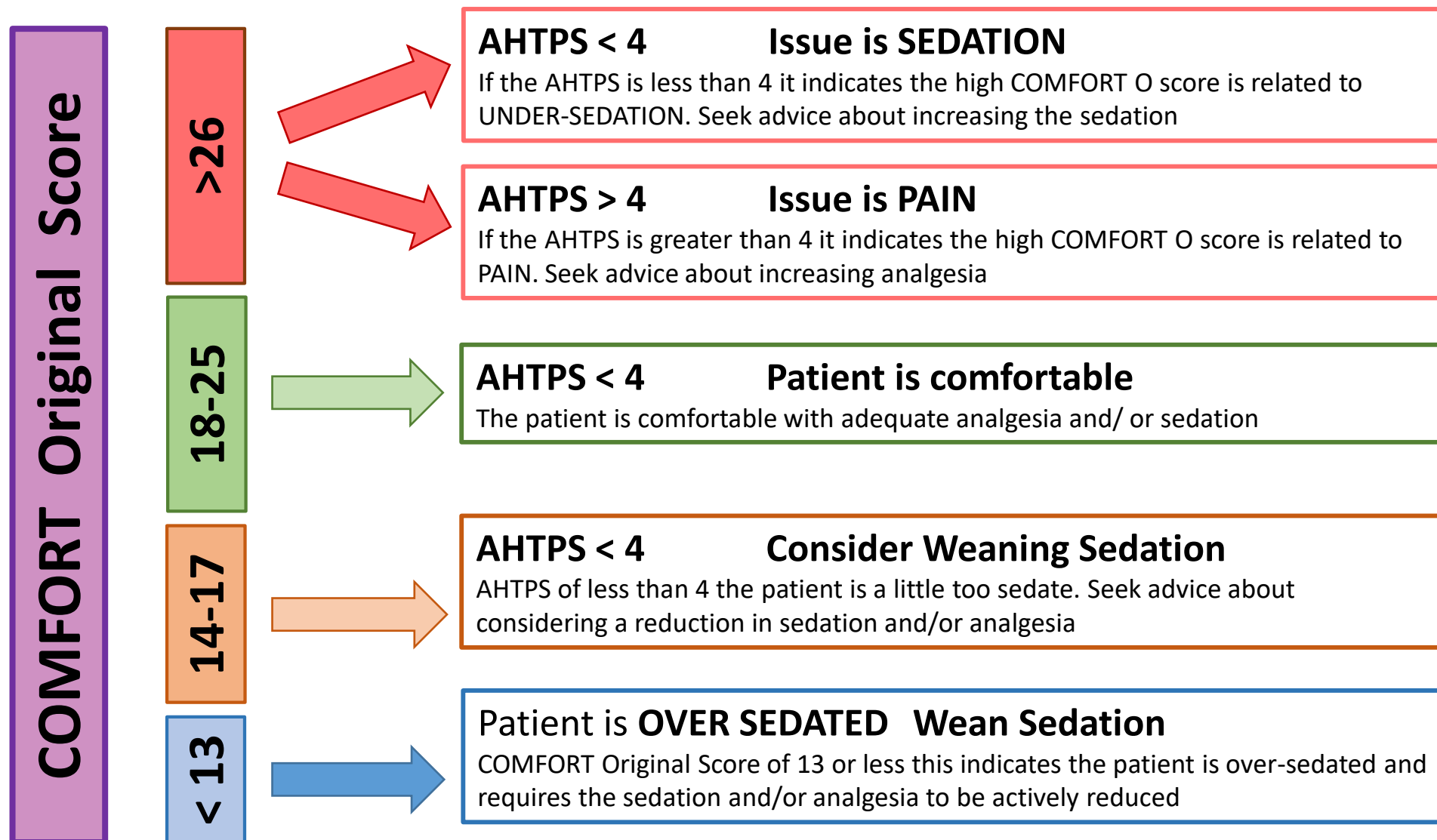
0	1	2	3	4	5	6	7	8	9	10
NO PAIN 0-1		MILD PAIN 1-3		MODERATE PAIN 4-7			SEVERE PAIN 8-10			



COMFORT Original Score Titration Guide



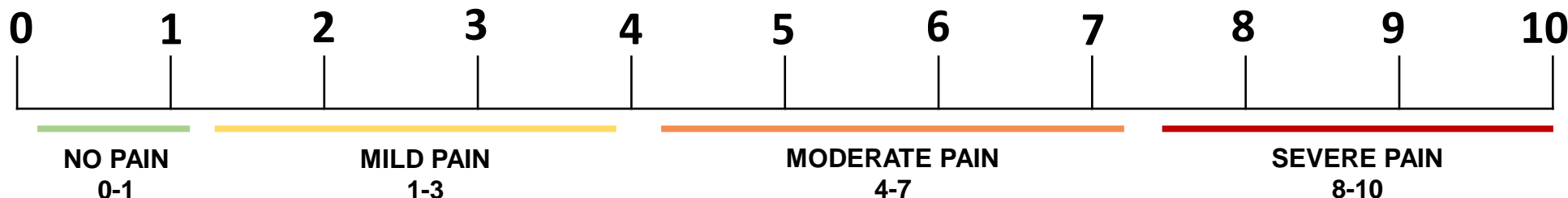
First assess the COMFORT Original Score then assess the pain score



Alder Hey Triage Pain Score

(0 – 10)

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



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

A high COMFORT Original 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 O Scores.

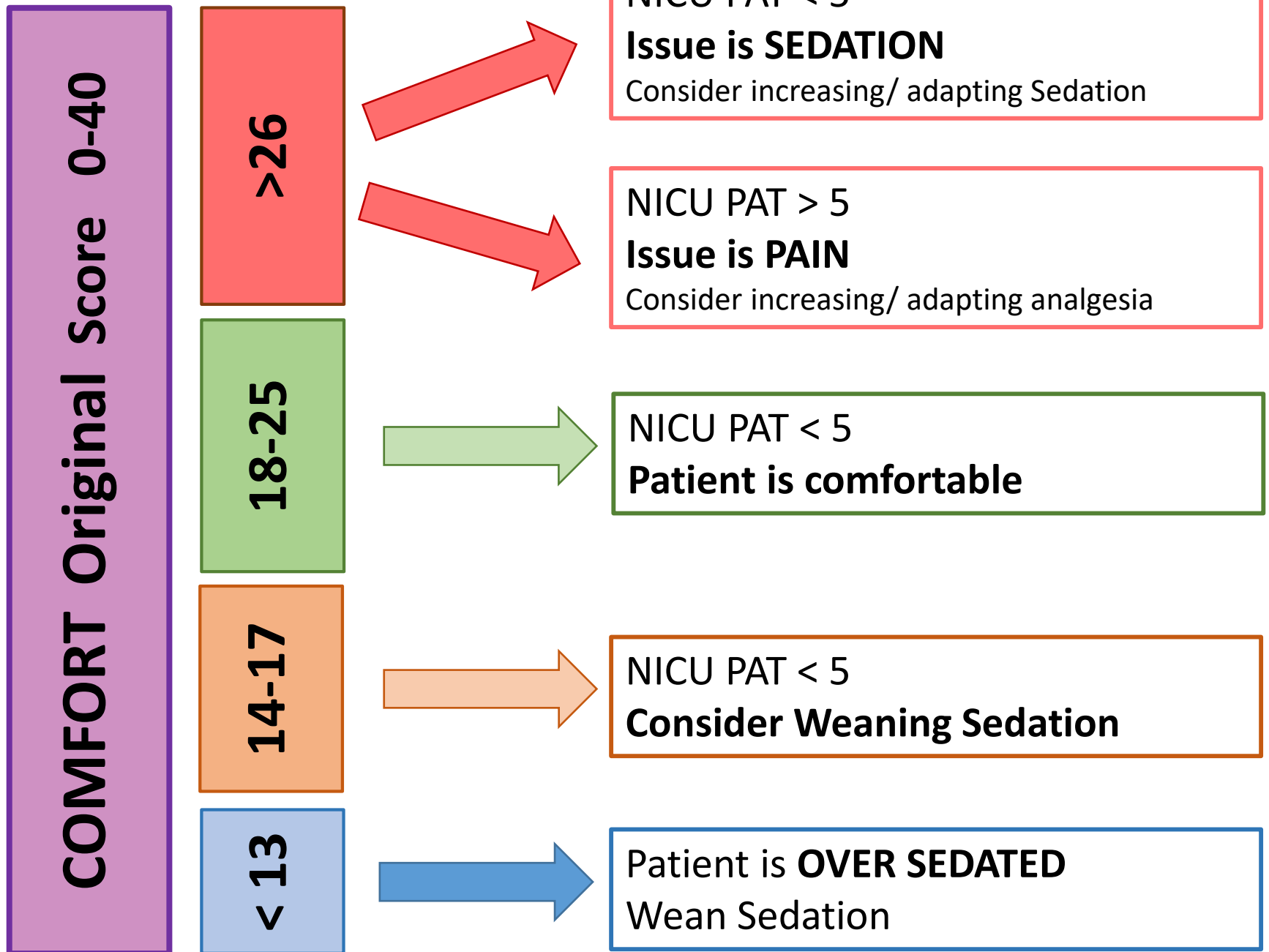
AHTPS score can be replaced with any appropriate alternative validated pain score e.g. FLACCs, NRS, FACES, CRIES, Patient Reported Score.

If a pain score is reported is 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



COMFORT Original Score

Titration Guide



NICU PAT Pain Score

Pain score, can be replaced with appropriate alternative validated pain score e.g. FACES, CRIES, NRS, FLACCs.

PHYSICAL	Posture/Tone	2- Flexed and/or Tense	PHYSIOLOGICAL	Respirations	2- Apnoes
		1- Extended			1- Tachypnoea
	Sleep Pattern	2- Agitated or withdrawn		Heart Rate	2- Fluctuating
		0- Relaxed			1- Tachycardia
	Expression	2- Grimace		Saturations	2- Desaturating
		1- Frown			0- Normal
	Cry	2- Yes		Blood Pressure	2- Hypotensive/ Hypertensive
		0- No			0- Normal
	Colour	2- Pale/Dusky/ Flushed		Nurse Perceptions	2- Yes Pain
		0- Pink			0- No Pain



COMFORT Original Score Titration Guide



First assess the COMFORT Original Score then assess the pain score

COMFORT Original Score

>26

NICU PAT < 5

Issue is SEDATION

If the NICU PAT is less than 5 it indicates the high COMFORT O score is related to UNDER-SEDATION. Seek advice about increasing the sedation

NICU PAT > 5-10

Issue is PAIN

If the NICU PAT is greater than 5-10 it indicates the high COMFORT O score is related to PAIN. Seek advice about increasing analgesia

18-25

NICU PAT < 5

Patient is comfortable

The patient is comfortable with adequate analgesia and/ or sedation

14-17

NICU PAT < 5

Consider Weaning Sedation

NICU PAT of less than 5 the patient is a little too sedate. Seek advice about considering a reduction in sedation and/or analgesia

<13

Patient is OVER SEDATED

Wean Sedation

COMFORT Original Score of 13 or less this indicates the patient is over-sedated and requires the sedation and/or analgesia to be actively reduced

NICU PAT

Pain Score

(0 – 20)

PHYSICAL	Posture/Tone	2- Flexed and/or Tense 1- Extended	PHYSIOLOGICAL	Respirations	2- Apnoes 1- Tachypnoea
	Sleep Pattern	2- Agitated or withdrawn 0- Relaxed		Heart Rate	2- Fluctuating 1- Tachycardia
	Expression	2- Grimace 1- Frown		Saturations	2- Desaturating 0- Normal
	Cry	2- Yes 0- No		Blood Pressure	2-Hypotensive/ Hypertensive 0- Normal
	Colour	2- Pale/Dusky/ Flushed 0- Pink		Nurse Perceptions	2- Yes Pain 0- No Pain

NICU PAT SCORE Interventions:

<5 = Nursing Comfort Measures

>5 = Paracetamol & nursing comfort measures

<10 = Paracetamol, opioid, nursing comfort measures, adjust dose of analgesia

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

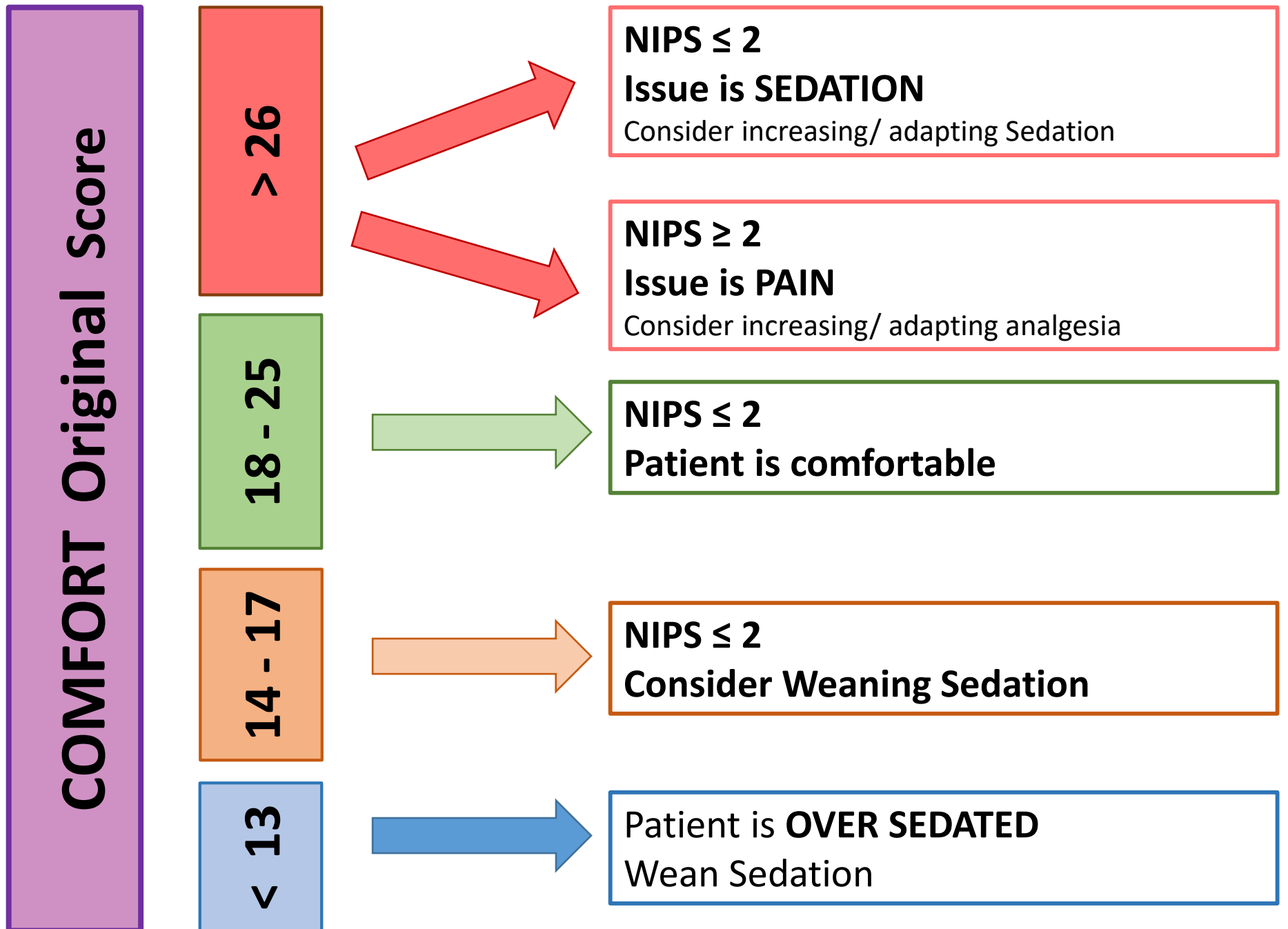
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NICU PAT can be replaced with any appropriate alternative validated pain score e.g. NRS, FLACCs, FACES, CRIES.



COMFORT Original Score

Titration Guide



NIPS Pain Score

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)		

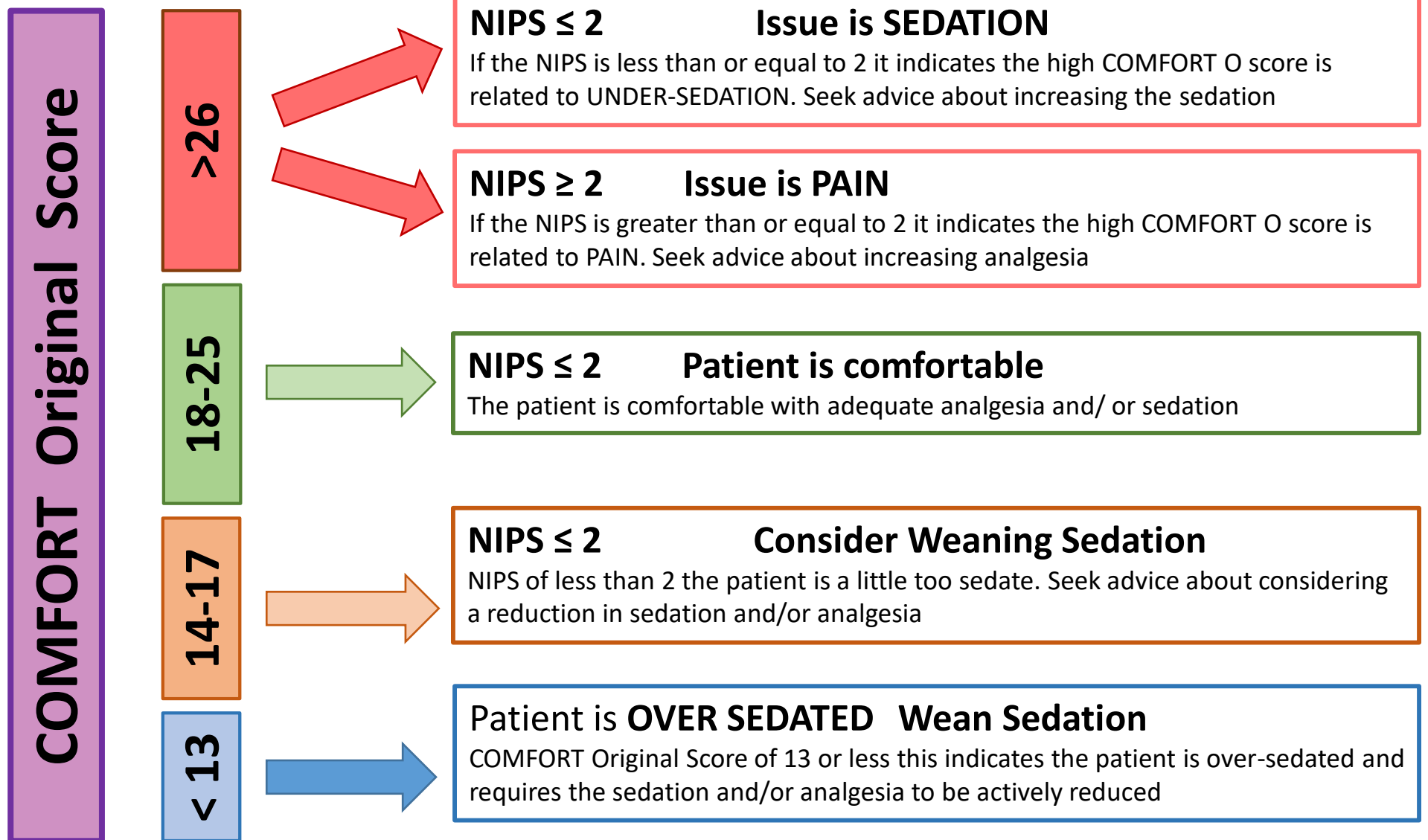
1	2	3	4	5	6	7
NO PAIN 0-1	MILD PAIN 2	MODERATE PAIN 3-4		SEVERE PAIN 5-7		



COMFORT Original Score Titration Guide



First assess the COMFORT Original Score then assess the pain score



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 Original Score the interpreter can more accurately determine if the high COMFORT score is in relation to pain or in relation to under-sedation

A high COMFORT Original 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 O Scores.

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

If a pain score of MORE THAN 2 is reported 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