

**Children's
COMFORT
PROMISE**



*We will do everything possible
to prevent and treat pain.*



Reducing pain with needle procedures



Our Objective

Design, test & deploy the clinical practices, and foster the culture, required to eliminate all needless pain and to minimize all moderate and severe physical pain and distress.....

Goal:

To partner with patients and families to create a better patient experience.

Scope:

All acute and procedural pain

Initial efforts :

We started with **needle procedures**, because the majority of patients and families named them as their (child's) worst pain. This will include: Lab draws ,POC testing, injections, PIV starts, PICC placements, arterial sticks or line placements, and PAC access.

Needle Procedures



Current staff attitudes:

- Needles don't hurt that much, especially finger sticks.
- The pain of a needle stick is unavoidable...
- "So just get it the *first time* and do it *quick!*"



Current reality:

- Needle sticks **do hurt** and cause anxiety (most kids rate them 6/10).
- Finger and heel sticks are usually more painful, take longer, and may require more than 1 stick.
- We have solid evidence on how to reduce or eliminate needle pain.



Why do we care?

- Most children receive a minimum of 18 needle procedures, in their first year of life.
- If they were born pre-term the exposure is significantly higher;
 - Critically ill infant may experience >480 painful procedures during NICU stay.
 - Neonates at 33 weeks gestational age admitted to NICU experienced an average of 10 painful procedures/day; 79 %were performed without any type of analgesia.



Barker DP (1995) Arch Dis Child Fetal Neonatal Ed 72:F47-8; Johnston CC (1997) Clin J Pain 13:308-12

Carbajal, R., Rousset, A., Danan, C., Coquery, S., Nolent, P., Ducrocq, S., et al. Epidemiology and treatment of painful procedures in neonates in intensive care units. The Journal of the American Medical Association 2008, 157, 1058-64.

Why do we care?

- Each procedure done without appropriate pain control, results in higher pain scores and anxiety with subsequent procedures.
- Untreated pain can have long-term consequences including:
 - pre-procedural anxiety
 - Hyperalgesia (increased sensitivity to pain)
 - needle fears (25 % of adults are needle phobic)
 - non adherence with vaccination schedules
 - avoidance of health care



Versloot J, Veerkamp JSJ, Hoogstraten J: Children's self-reported pain at the dentist. *Pain* 2008. 137:389-94

Taddio A, Chambers CT, Halperin SA, et al. Inadequate pain management during childhood immunizations: the nerve of it. *Clin Ther* 2009;31(Suppl 2):S152-67.)

Taddio A, Appleton M, Bortolussi R, Chambers C, Dubey V, Halperin S, et al. Reducing the pain of childhood vaccination: an evidence-based clinical practice guideline. *CMAJ : Canadian Medical Association journal* 2010 Dec 14;182(18):E843-55.

Best practice for needle procedures

The organizational goal is that **95% of the time** the following strategies are offered with appropriate education :

- Topical Anesthesia
- Sucrose or breast feeding(12 months or less)
- Comfort positioning
- Distraction



Topical Anesthetic to numb the skin

- Numb the skin prior to all needle sticks
(level 1 recommendation, Grade A evidence)



- 4% lidocaine (anacream®, LMX®)
 - Apply 30 minutes prior to procedure.
 - Cover with plastic wrap (or foam tape or Tegaderm®) to avoid getting in mouth or eyes.
 - Wipe off prior to injection, prep skin per protocol.
 - Can safely be left in place for 2 hours.
 - Effect lasts for 1 hour **after** it is removed.
 - Warm packs speed up numbing process (15-20 minutes) and reverses vasoconstriction.
 - **Cannot** be used on fingers or heels, as there are too many peripheral nerves there for cream to be effective.



The American Pain Society (APS, 2001), The Infusion Nurse Society (INS, 2006), and the American Society for Pain Management Nursing (ASPMN, 2011) Taddio et al 2010, Harrison et al 2013, Zempsky, 2008

Sucrose or breast feeding

- Giving sucrose or breast feeding prior to painful procedure has been shown to significantly reduce pain in babies 12 months and younger. (level 1 recommendation, grade A evidence)
- **Sucrose**
 - Just drops are needed (on pacifier, mom's finger, or side of cheek).
 - **Should** be used even if baby is NPO
 - Give 2 minutes prior to procedure
 - Once effective lasts for 4 minutes
 - Sweet taste is what activates the pain fighting pathways
 - Re-administer as needed during the procedure
 - Use only for painful procedures, **DO NOT USE** to soothe irritable babies who are NPO
- **Breast feeding**
 - Start 2-5 minutes before the procedure and continue throughout.
 - Breast milk alone does not work, mom is essential to the process.



Comfort positioning

level 1 recommendation, grade A evidence

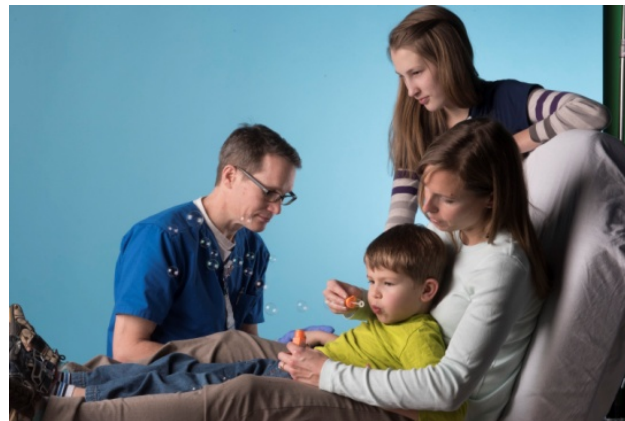
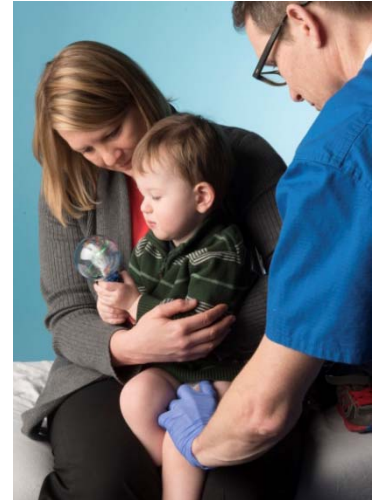
- For children **<6 months of age**
 - Swaddle, or use facilitated tucking, nesting
 - Ensure warmth
 - Skin to skin (need to start 10-15 minutes before And continues throughout for best effect)
 - Use parents to hold when possible
- For children **> 6 months of age**
 - Upright position is best (lowers pain scores, anxiety, fear)
 - Preference is for parents to hold or be close by
 - Give children school age and older a choice





Distraction

- Encourage parents to engage their child with age appropriate options :
 - Favorite toy, comfort item
 - Music, singing, voice
 - Breathing exercises (i.e. bubbles, pinwheels)
 - Books, find it sheets, stories, videos
 - Electronics - use what they have available and enjoy



Education/ Documentation

Introduce Children's Comfort Promise at admission

Comfort Promise - Learn, Bronchiolitis Baby

*Performed on: 12/01/2014 1601 By: Train, MF

Comfort Promise

Comfort Promise

Evidence supports that children will have less pain with needle procedures if the following strategies are used. Which are you open to using with your child?

Right click for Children's Comfort Promise reference page

	Yes	No	N/A
Numbing			
Sucrose/Breastfeeding			
Comfort Positioning			
Distraction			

Numbing comments

Sucrose/breastfeeding comments

Comfort positioning comments

Distraction comments


- Questions are intended to;
 - raise awareness
 - Introduce options
 - provide education

Documentation/ Education



Check in again when labs or other needle procedures are ordered

- Record preferences on the in room communication board

For needle procedures this includes: 

RN to draw off my line

Numbing the skin:
 4% lidocaine cream

Babies{ under 12 months):
 Sucrose
 Breast feeding

Comfort positioning:
 Sitting up in bed or chair
 Sitting on parents lap
 Other: _____

Distraction:
 Bubbles, pin wheels, breathing
 Stories, books, talking
 Electronics, music
 Other: _____

•We have cream that I can put on that helps with needle pain, would you like to try that?

•We know that giving babies sugar water before needle procedures acts like a pain medicine, do you have any concerns about us using sucrose for your baby?

•We know children do better with needle procedures if they are allowed to choose where they sit and if parents are holding or close by. What would you like to try?

•Do you have a favorite toy or game you would like to play with during the procedure? It usually helps if you are distracted, but if it helps you can also watch.

Documentation/ Education

- Activate conditional order for 4% lidocaine cream
- Chart use on MAR

Local Anesthetic for Needle Procedure (Initiated Pending), Ordered as: RN Local Anesthetic for Needle Procedure			
☰ Medications			
	💡 If patient is less than 36 wks gestation do not use Lidocaine 4% topical cream.		
<input type="checkbox"/>	<input checked="" type="checkbox"/> lidocaine topical (lidocaine 4% topical cream)	Give 1 application Topically PRN for lab draws, CREAM	
<input type="checkbox"/>	<input checked="" type="checkbox"/> lidocaine topical (lidocaine 4% topical cream)	Give 1 application Topically PRN for IV start/access port, CREAM	
<input type="checkbox"/>	<input checked="" type="checkbox"/> lidocaine topical (lidocaine 4% topical cream)	Give 1 application Topically PRN for Other, CREAM	PRN for IM/S...
<input type="checkbox"/>	<input checked="" type="checkbox"/> lidocaine (JTip Buffered Lidocaine)	Give 0.2 mL IntraDermal PRN for IV start	



Where is it ?



•4% Lidocaine cream;

- located in the pyxis, to override use “lidocaine” as search term
- Conditional orders are pre-checked on every admission order set

•Covering for cream;

- plastic wrap-supply rooms and nutrition rooms
- foam tape or Tegaderm® - bedside carts
- stockinette in supply room for squirmy toddlers (out of sight out of mind)

•Sucrose:

- supply room and some med rooms
- lab staff have available on carts

•Distraction supplies:

- Comfort carts
- lab cart
- patient 's room

•For References and more information

Go to Star Net “Around the System “ and click on Children’s Comfort Promise

Post Test



-
1. A conditional order set for 4% lidocaine cream is on all med/surg admission order sets. True or False ?
 2. Sucrose can be used for irritability with NPO babies. True or False ?
 3. 4% lidoderm cream should be applied to fingers and heels prior to all lab draws . True or False?
 4. Sucrose takes 2 minutes to work and work like a pain medicine for acute procedures. True or False?
 5. Laying patients older than 6 months flat during procedures helps decrease pain. True or False?
 6. Numbing the skin, sucrose, comfort positioning, and distraction have been proven to reduce or eliminate needle pain. True or False?

For questions or comments : Donna.eull@childrensmn.org

Test Key



1. A conditional order set for 4% lidocaine cream is on all med/surg admission order sets. **True** or False ?
2. Sucrose can be used for irritability with NPO babies. True or **False** ?
Sucrose should be used for acute procedural pain only
3. 4% lidoderm cream should be applied to fingers and heels prior to all lab draws . True or **False**?

There are too many peripheral nerves in the tips of fingers and heels for the cream to be effective

4. Sucrose takes 2 minutes to work and work like a pain medicine for acute procedures. **True** or False?
 5. Laying patients older than 6 months flat during procedures helps decrease pain. True or **False**?
- Once children have adequate trunk control, laying them down creates increased pain scores and increased levels of anxiety during painful procedures.**
6. Numbing the skin, sucrose, comfort positioning, and distraction have been proven to reduce or eliminate needle pain. **True** or False?

References are listed on Children's Comfort Promise page on Star Net

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