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

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

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.

**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
Introduce Children’s Comfort Promise at admission

- Questions are intended to:
  - raise awareness
  - introduce options
  - provide education
Check in again when labs or other needle procedures are ordered
• Record preferences on the in room communication board

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

<table>
<thead>
<tr>
<th>Medical Order for Needle Procedure (Initiated Pending), Ordered as: RN Local Anesthetic for Needle Procedure</th>
<th>Medications</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>If patient is less than 36 wks gestation do not use Lidocaine 4% topical cream.</td>
</tr>
<tr>
<td></td>
<td>Lidocaine topical (lidocaine 4% topical cream)</td>
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<td></td>
<td>Lidocaine topical (lidocaine 4% topical cream)</td>
</tr>
<tr>
<td></td>
<td>Lidocaine topical (lidocaine 4% topical cream)</td>
</tr>
<tr>
<td></td>
<td>Lidocaine (1:10 Buffered Lidocaine)</td>
</tr>
</tbody>
</table>
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 or 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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