Intravenous insertions and venipuncture are the two most common sources of pain in hospitalized children. Pain from these procedures result in short term suffering and also influence the response to pain and treatments in the future. A child’s comfort is important to parents as they often are present to watch the procedure and find it difficult to console their child. Literature indicates that both drug and non-drug therapies are beneficial to the child during procedures. Feedback from patients and parents indicated that needlesticks are a source of pain, anxiety and dissatisfaction. Evaluation data and a review of literature demonstrated that we could improve care.

Aims

A multidisciplinary group (nurses, child life specialist, phlebotomists, Vascular Access nurses, physicians, pharmacist, parent) was formed to improve pain management, decrease anxiety and increase patient satisfaction with needlesticks.

Goals to change the culture included:
- Integrate best practices into patient care
- Use non-drug methods to decrease pain and anxiety
- Teach and model coaching skills
- Pharmacological methods and devices to help with pain management, decrease anxiety and increase patient satisfaction with needlesticks

Individualize Care: The relationship and how well a clinician knows and connects with a child contributes to the success of procedures and learning coping skills. Patient care that includes choices can be an effective way of connecting with the child. An individualized Poke Plan (Figure 1) that captures past experiences and coping skills provides the information needed for the health care team to provide care with needlesticks and blood draws. The Poke Plan is the voice of the child.

Distraction: Evidence indicates that cognitive/behavioral interventions can help manage pain and distress with needle related procedures. The largest effect is the help of a clinician can select a position, practice the position and use it during a procedure. Patient/Family Centered Care and collaborative relationships were the drivers for this change. Principles of change and quality improvement were used to develop a campaign for a change in culture and practice. Poke-A-Dot (Figure 4) was used as a mascot to convey the message of change and introduce the Poke Plan. Buttons, posters and an animated picture show were used to highlight the change and engage staff in the process.

Best Words: Reducing anxiety with needlesticks can be facilitated with patient/parent preparation and coaching during the procedure. Words and phrases that have been shown to work can be adapted to the situation and the child.

Table 1: Best Words for Preparing Young Children

| Needlestick | Preparing
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>You can do it.</td>
<td>very brave boy/girl</td>
</tr>
<tr>
<td>Uncomfortable</td>
<td>that is important on your arm</td>
</tr>
<tr>
<td>Last one</td>
<td>you will feel some tingles</td>
</tr>
</tbody>
</table>

Table 2: Best Words for Helping with Procedures

| Needlestick | Helping
|------------|-------|
| You will be okay, there is nothing to worry about. | When I count to 3, show me the feeling away. (distraction)
| If you wait that is not it. You have to poke. | You are being very brave. (labeled praise)
| Don’t cry | That was hard. I am proud of you. |
| Grinning face | Grinning face |
| Engaging hands | Engaging hands |
| Slapping back | Slapping back |

Best Practices

- Pharmacological methods and devices to help with pain
- Use non-drug methods to decrease pain and anxiety
- Integrate best practices into patient care
- Develop processes to sustain changes

Next Steps

- On-line education
- "Busting Barriers" meetings
- Collaborate with Ambulatory Care clinics to roll out practice changes

Evaluation

A variety of data was used to evaluate the effect on the change in practice. Parent interviews indicate that the Poke Plan has been helpful. Comments from parents include:
- It is flexible, empowering and comforting
- Distraction was good
- It worked!
- My teenager did not need it

One hundred seventeen staff (nurses, phlebotomists, child life specialists) completed a post implementation survey. They indicated that assessment data, specific activities and location of the Plan were helpful. The location of the Plan on the door allows clinicians to quickly see the child’s preferences and best distraction items (Figure 6). Staff indicated that there were many positive effects of the campaign with the greatest effect being empowering families and increasing team work and team communication (Figure 7). These effects have provided enthusiasm and ongoing interest to take the best practices to other areas and continue to work on identifying the best products and devices to decrease needlestick pain.

Timeline

<table>
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<tr>
<th>Problem Identification</th>
<th>Goal development and Campaign planning</th>
<th>Internal innovation grant obtained (FIGS)</th>
<th>Mascot and Resource development</th>
<th>Pilot of Poke Plan utilizing unit champions and feedback</th>
<th>Dissemination and diffusion of best practice and work flow</th>
<th>Roll out to inpatient units and Radiology</th>
<th>Evaluation Plan and Roll Out to Ambulatory Care</th>
</tr>
</thead>
</table>

Changing Practice

Aims

- Education about age appropriate distraction, best words and positions of comforts were provided to frontline staff.
- Classes on using distraction were provided to phlebotomists and a hospital wide nurse education day provided information to over 500 nurses (Figure 5). The process for developing a Poke Plan was piloted on one unit and it was adapted as it is rolled out throughout the hospital. Unit champions provided education and leadership of the practice change and quality monitoring at the unit level.