Interacting With Pediatric Patients During Care

by Bryan Fischberg, Chris Flood-Gutierrez and Michelle Cumber

EMT Objectives

After reading this article, the EMT will be able to:

- Cite at least two common perceptions of children receiving care;
- List a common fear held by children in major age groups;
- Offer at least two effective strategies to communicate with children during care;
- Identify at least one method of positioning children for comfort during medical procedures;
- Describe what a child life program or specialist does for children in the healthcare setting.

Introduction

Whenever a child is acutely sick or injured, the impact is rarely isolated to the child. It often ripples to the immediate family and other close caregivers. This "family unit" is an extension that includes the patient and deserves special thought and understanding during healthcare team interactions. Done poorly, they can inflame the situation and worsen the experience and outcome for the patient and family unit. Done well, they can make the encounter painless. Healthcare professionals who care for that child can also be affected by the episode. EMS providers have wide variations in comfort level and stress dealing with children and those concerned for them. The purpose of this article is to introduce principles and considerations for interacting with pediatric patients during EMS care to help these encounters go more smoothly.

General Pediatric Communication Principles

You probably realize first impressions can set the trajectory for the entire call. Anticipate the impression of your uniform and appearance through the eyes of a scared child, babysitter, or parent. For example, EMTs who wear a dark uniform with a vest, badge, and sturdy belt can be easily mistaken for a police officer. Children may think your presence means they're in trouble rather than to help them with their illness or injury. Similarly, are police routinely present on your scenes? Defuse anxiety by letting them know they are there to keep everybody safe rather than having the child nervous and worried about having done something wrong. Your carriage, attitude, behavior, and honesty set the tone, rapport, trust, and cooperation healthcare professionals will experience downstream. It takes less effort to establish trust and sustain rapport in the beginning than rebuild it later, after it's been lost.

Children may think your presence means they're in trouble rather than to help them with their illness or injury.

Non-verbal children respond to soothing voice. Just think of the gentle manner and warm voice of Fred Rogers from *Mister Rogers' Neighborhood!* Use simple, age-appropriate language.

Realize positively-oriented instructions work better than language that is negative or has punitive implication. "Hold still" works better than "don't move."

Be judicious with asking permission and give realistic choices where you can. For example, if you need to assess breath sounds, don't ask "Can I listen to your breathing?" What if they say "no"? Instead, offer the child an acceptable choice such as "I need to listen to your breathing. Do you want me to listen to your left or right lung first?"

When children have more developed language skills, be honest and sympathetic. Young children are neither concerned nor understand

-continued from page 8

rationale for the things you do. Their anxiety is partially from the fear of the unknown. So, use sensory descriptions rather than explanations. For example, if you're going to use an alcohol prep, the adolescent understands you intend to sanitize the skin but the preschooler just wants to know that the little cloth inside the packet will feel cold, wet, and not hurt.

Help parents cope. They may feel anxious, fearful, angry, or guilty. Any of these may impair their ability to understand the situation and implications. Engage, explain the situation, frequently update, and reassure parents. Enlist their assistance to keep the child comfortable and focused or distracted, as appropriate. Empower parents to talk, sing, and hold the child when it doesn't interfere with care.

Your considerate use of language can make a huge difference. Use pronouns correctly. Don't say "we are going to take our" medication when you really mean "I am going to give you your medication." Be mindful of words that have dual meanings. Consider the sentence "A nurse at the hospital is going to put you on a stretcher and give you IV dye." A stretch-er sounds like a painful device through the imagination of a scared child. Isn't ivy ("IV") the green stuff outside mom told me not to touch? Will I get in trouble? My goldfish just died, what does die ("dye") mean?! Some other child-friendly language suggestions are summarized in *Table 1*.

During transport offer the child a security object if it doesn't get in the way of your assessment or care; e.g., a favorite toy, stuffed animal, blanket, etc. Be mindful to limit high speed, siren use, and other startling experiences only to those necessary, and give warning whenever possible and practical. If your agency offers a toy, either clean it or let the child keep it to manage potential infection control risks.

Table 1:

Routine Expression:	Consideration and Replacement:
"Don't move."	Negatively oriented. "This is the time to hold still."
"This is going to hurt."	Induces an expectation of pain. "Some patients say it feels like [use a soft descriptive word]."
"Give you a shot."	"I need to give you some medicine using a small needle."
Intravenous / IV	Jargon that may be misunderstood. "A way to give medicine through a small plastic straw."
"Flush your IV."	Jargon that may be misunderstood. "This special water helps keep the small plastic tube clear so it is ready for us to use the next time you may need medicine."
"This medicine will burn."	Induces an expectation of pain. "Some children say they feel a warm feeling. Can you tell me how it feels for you?"
"This medicine will smell bad."	Predisposes child for discomfort. "This medicine will smell different than anything you have smelled before."
ICU or PICU	Jargon misunderstood as "I see you" or "pick you." "A place where you'll have your own nurse and get extra care."
Take vital signs	Nothing is taken from the child. "Measure how well your breathing and heart are working."
Incision or make a hole	Threatens body integrity and image. "A small opening."
Tourniquet	Jargon. "Big rubber band."
Burn	May be misinterpreted as physical burn. "Sting" or "feel warm."
Stretcher	Misinterpreted as "stretch her" or child will be stretched. "Special bed on wheels."

Major Fears

Trauma and hospitalization can illicit many fears among children and teens and can vary by age group. Infants and toddlers can respond from separation of their parent or caregiver so having them present whenever possible can be beneficial. From preschoolers to adolescents some common fears are loss of control, mutilation or bodily injury, fear of the unknown, and death. Some things to consider when treating a child are keeping bloody wounds covered, reassuring the child or teen that they are ok, and explaining upcoming events with soft language and simple terminology so that they can understand what is going to happen. Another common fear among school-age children and adolescents is being unable to live up to their parents expectations. So for example if a father stresses that his 12 year old son is not really hurt and tells him to "just deal with the pain" the child may feel ashamed if he breaks down and cries while in the ambulance. Teens can also be very worried about their body image if it becomes altered in any way, as well as separating from their peer group. Reassuring the child's emotions and fears will help them cope with the trauma and its experience. A summary of key fears by age group is in *Table 2 (next page)*.

Be mindful to limit high speed, siren use, and other startling experiences only to those necessary, and give warning whenever possible and practical.

Considerations During Management

To be most effective when dealing with children during a trauma you should take their age and development level into account. Being cognizant of the major fears that accompany each age group differently can enable an EMS provider to intervene appropriately. Childhood trauma has an impact on the emotional, behavioral, cognitive, and social function-

-continues on page 10

-continued from page 9

ing of a child. These effects are strongest for infants and younger children. It is important not to minimize their experience with the trauma or to presume they are resilient.

Age-Specific Approach

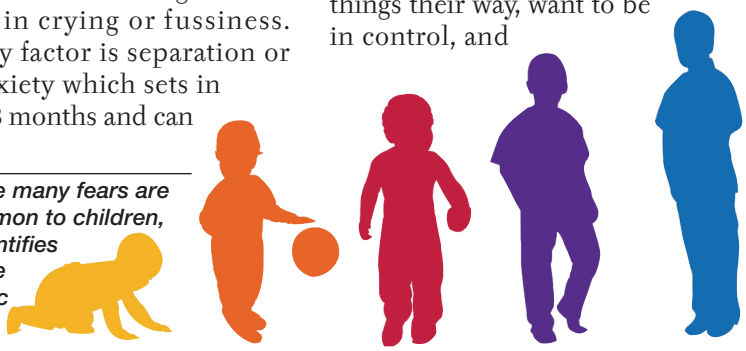
Here are some child development reminders when working with kids of different ages:

Infants (0-12 months old)

Infants are controlled by their senses so keeping equipment warm and limiting noise can help to keep them calm. At this age, the strongest bond is with the parent or caregiver so whenever possible have them present and engaged. If the parent is very emotional and anxious the infant will perceive the angst which may result in crying or fussiness. Another key factor is separation or stranger anxiety which sets in between 6-8 months and can be present until almost two years of age causing the infant or toddler to cry, become upset, get very quiet, or hide when a stranger is present.

Toddler (1-3 years old)

As infants approach the toddler stage, their mobility and vocabulary begin to increase. By 18 months old they can run in a clumsy fashion and have a vocabulary of approximately 50-75 words, which will steadily increase to about 200 by the age of three. One of the most famous words toddlers love to use is the word "no." With increasing autonomy, "no" is a really strong word and a way for a toddler to exercise his independence. Although it can be frustrating to an adult, it's a healthy and important milestone for toddlers and a way for them to be assertive. During this stage of development, they often want things their way, want to be in control, and won't always share. Toddlers begin to understand simple time relationships like "after your nap," or "in a minute." But, at this stage, they do not appreciate measures of time such as hours, days, or weeks. Egocentricity is a big part of a toddler's and preschooler's cognitive development.



One of the most famous words toddlers love to use is 'no.' With increasing autonomy, 'no' is a really strong word and a way for a toddler to exercise his independence.

Preschooler (3-5 years old)

These years begin a time when magical thinking is flourishing—little boys and girls become dinosaurs, princesses, and scientists; medicine can become a magical potion; and stuffed animals and toys come alive. Through this process they test out new identities, practice social skills, and use pretend play to make sense out of the world around them. Often, children will use magical thinking to explain the cause of events they are unfamiliar with or frightened by as well. For example, if a five-year old's sister was hit by a car while riding her bicycle, the five-year-old may think that he caused this to happen because he didn't eat all his vegetables for dinner or didn't clean his room when his mom asked him to. Children in this age group can only see the world from their point of view, and their cognitive ability is limited by egocentrism. Other reminders that may help when interacting with preschool aged children is that they have the ability to tolerate brief separation from their parents, they tend to ask many "why" and "what" questions, and have an awareness of body parts. When explaining or answering their questions, use softer language with simple vocabulary. Preschoolers can appreciate temporal relationships, but expressed in simple, familiar terms. "We will be at the hospital in one *Dora The Explorer* show."

Table 2: While many fears are broadly common to children, this table identifies those that are key in specific age groups.

Major Fear	Infant	Toddler	Pre-Schooler	School-Aged	Adolescent
Separation	X	X			
Stranger Anxiety	>6-8 months	≤2 years			
Loss of Control		X	X	X	X
Injury and Mutilation		X	X	X	
The Unknown			X	X	X
Death			X	X	X
Falling Short of Expectations				X	X
Altered Body Image					X
Separation from Peer Group					X

-continued from page 10

School Aged (6-11 years old)

As children approach the school age years they are able to use logic and strategy for problem solving, and are able to understand the concept of cause and effect. Once these concepts are mastered, magical thinking will become less and less prevalent (towards the latter part of the age group). They can comprehend simple requests, have a full awareness of body parts, need to know the "why's", and can understand short step-by-step explanations. It is a good rule of thumb to use softer language and simple vocabulary with this age group as well.

Adolescent (12-18 years old)

This population can think abstractly. They expect adult-like treatment desiring independence even though they may have child-like fears, and often pretend to know more than they actually do. Often, they are concerned with their own body image and can struggle with identity, experience moodiness, and have a great need for privacy. Within this age range, peer groups and friends are an important part of socialization and can be very influential in a teen's life, sometimes contributing to risk-taking behaviors. Another reminder regarding all age groups is that under stress all children and adolescents have a tendency to regress to a younger age group and act out. Being patient and providing a supportive environment can help the child or teen cope with the stressful experience.

Under stress all children and adolescents have a tendency to regress to a younger age group and act out.

Intervening With Pediatric Patients And Families

When working with pediatric patients in the field, there are various intervention methods to help lessen their anxiety as well as that of families who are present at the scene. One of the most important factors is to minimize parental or caregiver separation. Practicing family-centered care, which means having loved ones close during all experiences (when they are acting appropriately) is very beneficial for patients, especially young children. Parents and caregivers know their children best and can be a significant help while trying to calm a pediatric patient or help them cooperate with procedures. Especially when working with children who have developmental delays or special needs, parents and caregivers will know how to console them, what may agitate them, how they may react in certain situations, and what will help soothe them. Simple techniques such as speaking softly, approaching these patients slowly, dimming the lights on the ambulance, not using loud sirens, and appealing to their unique needs are very important considerations. Even asking families "what can we do to make this an easier

-continues on page 12

-continued from page 11

or better experience for ..." will be much appreciated and help you understand what the patient needs.

Explaining the sequence of events for parents is important to lessen their anxiety, too. According to *Baxter* (2016), parents cause 17% of infant's distress and 53% of a child's distress. Children and adolescents can sense a parent's anxiety; therefore it is imperative to help make sure they understand just as much as the child does. It is important parents are kept informed and prepared for the next steps to come.

For many children, especially infants through preschoolers, having a familiar item with them is comforting.

For many children, especially infants through preschoolers, having a familiar item with them is comforting. These comfort items can include a favorite blanket, stuffed animal, doll, toy, or any other item the child wishes to have close to them. These items, along with their parent or caregiver, allow for something familiar in an unfamiliar environment and help to normalize the surroundings as well.

Furthermore, when approaching children and adolescents, it is important to do so in a friendly, non-threatening way. Approach them slowly and bend down to their level, if possible. Building rapport with patients of all ages is essential to develop trust and show them that you are there to help them and not to hurt them intentionally. In addition, when examining toddlers and preschoolers especially, examine them using the "toe to head" approach; this way they can see you at all times and understand what part you are looking at and going to be touching. Explain what you are going to do if you need to place your hands on them and be honest; if something may hurt, it is alright to tell them. Not telling them or hiding the fact that something may feel uncomfortable can diminish the trusting relationship you are working hard to develop with them. It is helpful to reassure them that they are not to blame for any accident or injury that has occurred and that they are not in trouble. Remember preschool children, especially, use "magical thinking" to understand what is going on around them and it is easy for them to feel guilty or shameful about what is happening and feel like it is their fault.

Young children including toddlers, preschoolers, and young school age children specifically need simple, concrete explanations of what is occurring and what their "job" is during a test or procedure. They love knowing what they can do to help! For example, when checking their oxygen saturation by pulse oximeter, one way you could approach it is by saying "we are going to place a special clip on your finger that will light up red to see how you are breathing. It doesn't hurt; it is only a clip. Your job is to hold nice and still." Similarly, when the paramedic is placing an IV, you can say "she is going to place a special straw in one of the blue lines in your arm, called veins, so we can give you some special drinks to help you feel stronger. You may feel a little pinch as we place it but once the straw is in the right place, the pinch will go away. Your job is to hold nice and still." These are two examples of simple, accurate descriptions of what a child may experience. Should the child cry or scream it is appropriate for you to validate, and the child express, their emotion. If you anticipate the child's reaction may escalate, reinforce boundaries and expectations for their behavior. "It's ok to cry or scream, but it's not ok to bite, kick, or hurt me."

Always remember to be honest about what is happening, don't give false promises unless you know for sure you can follow-up with it (such as, "I will see you in the hospital later" and then not be able to show up), and only tell a patient what they will physically experience.

For example, if a child needs surgery, you don't have to mention the breathing tube or exact details of what will happen under anesthesia. You can say something along the lines of "the doctors will give you special sleepy medicine so nothing hurts when they make your leg feel better." As a child grows older, simple explanations are still beneficial, though more details can be used, if the patient is asking for them.

Furthermore, much consideration should be given to respecting a patient's modesty and privacy during the stressful times you are interacting with them. School-age children and adolescents specifically are two age groups where respecting privacy is most vital for their development. Try your best to keep their bodies covered, especially their private parts, and only examine them if it is absolutely needed. Include older school age children and teens in conversations regarding their health and what they will experience. It can reduce anxiety and give them a sense of control during a situation that can be perceived as overwhelming.

ONE VOICE Approach

When working with patients and families both in the field and in the hospital setting consideration surrounding the environment and staff present to assist should also be made. To create a less frightening environment, the ONE VOICE approach was developed for healthcare professionals to use during tests or medical procedures. Each letter of this acronym represents a different part of the environment to be mindful of during these stressful instances. Here is what each letter signifies according to *ONE VOICE 4 Kids, LLC* (1996):

- **O**ne voice should be heard during procedure
- **N**eed parental involvement
- **E**ducate patient before the procedure about what is going to happen
- **V**alidate child with words
- **O**ffer the most comfortable, non-threatening position *(see Figure 3)*
- **I**ndividualize your game plan
- **C**hoose appropriate distraction to be used
- **E**liminate unnecessary people not actively involved with the procedure

When members of the healthcare team utilize the ONE VOICE

-continued from page 12

approach during medical procedures, the patient and family usually have a much better experience and anxiety is often lessened. It can be traumatic to have many different staff members in a room around a child doing one procedure or test which often becomes very chaotic with multiple people speaking at once. When the ONE VOICE approach is utilized, one person is responsible for speaking in the room and only a minimal amount of people are present. The environment overall is much calmer for the patient and they are usually more cooperative as well. If the scene is not so well-regulated, consider applying ONE VOICE for assessments or procedures in the ambulance where you might have more control.

With the ONE VOICE approach, one person is responsible for speaking in the room and only a minimal amount of people are present.

Here is a link demonstrating the effectiveness of using the ONE VOICE approach during an IV placement on a child: http://www.youtube.com/watch?v=2IdwPFyAuDg

Positioning For Comfort

In the early 1980s, child life specialist Mary Barkey and Barbara Stephens, RN pioneered comfort positioning techniques in the hospital setting after observing how children were often brought into a room without a familiar caregiver and held down by multiple staff members for medical procedures. These were ultimately traumatizing experiences for them and their families (*Child Life Council*, 2008). They developed a Comfort Measures Model for healthcare staff to use that included preparation for the child and family prior to the test or procedure, utilizing the ONE VOICE approach, positioning the child in the least threatening way (usually sitting up), and having the child choose an engaging distraction technique (*Child Life Council*, 2008). The goal of this model is to increase the comfort and cooperation of pediatric patients while performing tests and procedures. Comfort positions provide an active role for the caregiver during this stressful time and allow the child to be either in their caregiver's lap or next to them for comfort. Examples of comfort positions are shown in *Figure 3*.

Figure 3:

Distraction Boxes In The Ambulances

Many people will ask how they can make the ambulance ride to the hospital more child-friendly. Here is how: distraction boxes! Boxes containing

-continues on page 14

CEU Article: Child Interactions

-continued from page 13

items such as stickers, stress balls, bubbles, glitter wands, Play-Doh®, small infant rattles or toys, portable DVD player with DVDs, and even an iPad with common games to play or Netflix available to watch (if you can!). *(See Photo 4.)* These all help to enhance a child's ride to the hospital by making it more engaging and fun if they are awake and appropriate for these items. Other times, simple communication about the child or adolescent's life aside from the incident that brought them into your care is also a great distraction for the ride.

Photo 4:

Distraction Box

What Is A Child Life Specialist?

Child life specialists "are trained professionals with expertise in helping children and their families overcome life's most challenging events" (*Child Life Council*, 2017). They help explain tests, procedures, surgeries, and diagnoses to patients and families using developmentally-appropriate terminology and real medical equipment while helping to normalize the hospital environment to promote the most effective coping during such stressful times in their lives. "Using therapeutic play, expressive modalities, and psychological preparation as primary tools, in collaboration with the entire health care team and family, child life interventions facilitate coping and adjustment at times and under circumstances that might otherwise prove overwhelming for the child" (*American Academy*, 2014).

Child life specialists also provide bereavement support for patients and families, as well as legacy building and memory making activities at the end of life for pediatric patients. Children process information around them very differently from adults and have unique needs for managing a hospitalization, stress, and trauma (*Child Life Council*, 2017). Child life specialists understand these distinct needs and work with patients and families to provide the most positive experience while hospitalized.

Child Life Specialists In The Emergency Department

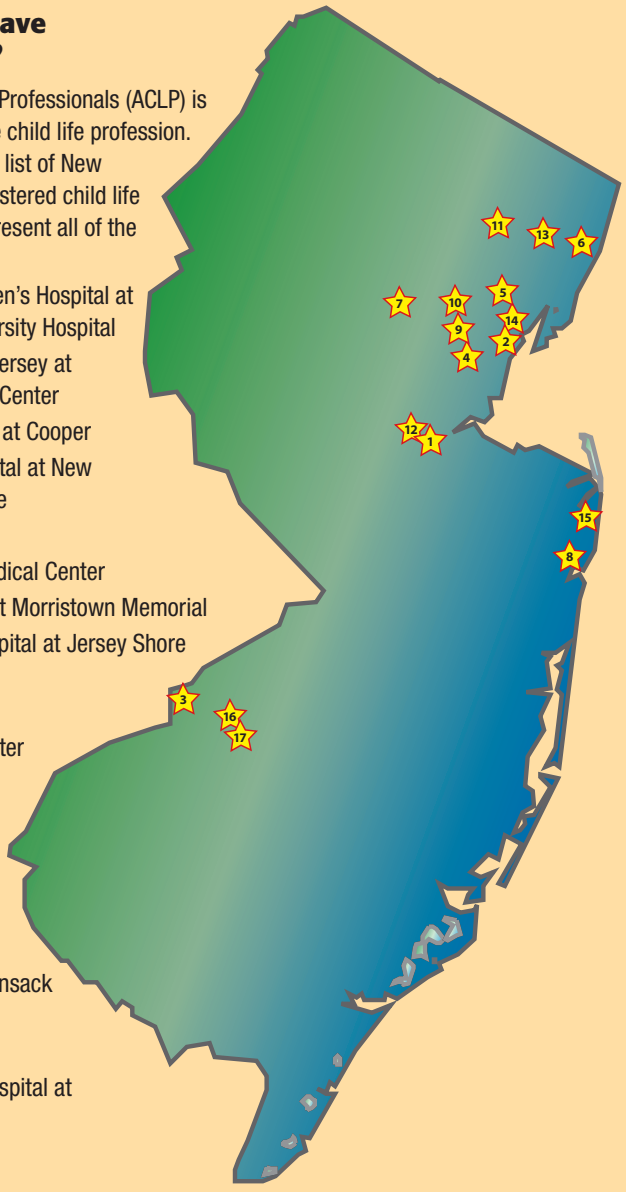
When a patient is brought to the hospital, most of the time their first experience is in the emergency department. In some cases, their experience may begin in the trauma bay which is another overwhelming experience on its own. Child life specialists working in the pediatric emergency department help alleviate fears and misconceptions pediatric patients and families have while they are hospitalized. This serves to normalize the

-continues on page 15

Which NJ Hospitals Have A Child Life Program?

The Association of Child Life Professionals (ACLP) is the national organization for the child life profession. The following is an alphabetical list of New Jersey hospitals with ACLP-registered child life programs. This list may not represent all of the facilities with programs.

1. Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital
2. Children's Hospital of New Jersey at Newark Beth Israel Medical Center
3. Children's Regional Hospital at Cooper
4. Children's Specialized Hospital at New Brunswick and Mountainside
5. Clara Maass Medical Center
6. Englewood Hospital and Medical Center
7. Goryeb Children's Hospital at Morristown Memorial
8. K. Hovnanian Children's Hospital at Jersey Shore University Medical Center
9. Overlook Hospital
10. Saint Barnabas Medical Center
11. St. Joseph's Children's Hospital
12. The Children's Hospital at Saint Peter's University Hospital
13. The Joseph M. Sanzari Children's Hospital at Hackensack University Medical Center
14. The University Hospital
15. The Unterberg Children's Hospital at Monmouth Medical Center
16. Virtua Voorhees
17. Voorhees Pediatric Facility



-continued from page 14

environment and make it a less traumatizing experience. When a pediatric patient is brought in as a trauma, if appropriate, the child life specialist will be next to the patient explaining what is happening and helping to make it a less traumatizing experience. If the patient is too ill or unconscious, the child life specialist will provide support to the family during that time.

The child life specialist will be next to the patient explaining what is happening and helping to make it a less traumatizing experience.

Conclusion

We hope you have a greater awareness of the issues and broader set of tools to deal with pediatric patients. It takes practice for these considerations and practices to become natural and habitual for most of us. But, applied correctly, you can improve the quality of care you bring to children and lessen the stress on their families and yourself in the process.

***Bryan Fischberg**, NRP is an EMS Educator for the Mobile Health Service at Robert Wood Johnson University Hospital and Clinical Instructor in the Department of Emergency Medicine at Rutgers-Robert Wood Johnson Medical School. He is a Life Member of, and acting EMS Chief for, **Pennington Road First Aid Unit** in the 9th District.*

***Chris Flood-Gutierrez**, MA, CCLS, CHTP is Child Life Coordinator for the Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital. Ms. Flood-Gutierrez has extensive experience in the pediatric intensive care unit and perioperative settings.*

***Michelle Cumber**, CCLS, CEIM is a Child Life Specialist for the Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital. She primarily practices in the pediatric emergency department.*

Resources

American Academy of Pediatrics (2014). *Child life services,* 133(5). Retrieved from http://pediatrics.aappublications.org/content/133/5/e1471.full

Baxter, A. *New and novel – addressing pediatric needle pain* [PowerPoint Slides]. Retrieved from *It takes a village:* Comprehensive collaborative care child life conference 10/14/16 at the Children's Hospital of Philadelphia.

Child Life Council (2017). Retrieved from www.childlife.org

Child Life Council (2008). *Comfort measures for invasive procedures:* A major paradigm shift in pediatric practice. The Bulletin, 26(3), 1-16.

ONE VOICE 4 KIDS, LLC (1996). *ONE VOICE: Creating a less threatening environment for children undergoing medical procedures.* Retrieved from http://www.onevoice4kids.com/

UF Health (2017). *Nonpharmacologic management of pain.* Retrieved from http://pami.emergency.med.jax.ufl.edu/e-learning-modules/non-pharmacological-treatment-of-pain/#prettyPhoto