

# Caring for Kids: Building a Safe and Supportive Infusion Experience

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## Caring for Kids: Building a Safe and Supportive Infusion Experience

Expanding infusion services to include pediatric patients presents a valuable opportunity to improve access to care for a vulnerable population with specialized needs. This guidance document is intended to support infusion professionals in implementing or expanding pediatric services within their centers. It offers practical strategies, recommended best practices, and operational insights to help create a safe, effective, and child-centered environment for delivering infusion therapy.

### Getting Ready: Setting the Stage for Success

- **Pre-Infusion Preparation**

- **Create a Pediatric Welcome Packet**

- Develop a family-friendly welcome packet for pediatric patients and their caregivers to support a smooth, informed start to treatment. This packet should include **contact information** for both the infusion center and the prescribing provider, along with a clear, age-appropriate **“What to Expect” overview** of the infusion process.
    - Include tips for preparing the child at home, such as how to talk about the visit, what to bring for comfort or distraction, and how to manage meals or medications beforehand.
    - A brief **FAQ section** can address common caregiver questions about safety, side effects, how long the visit will take, and what happens if the child is sick on a treatment day.
    - Consider adding space for notes and a list of follow-up dates to help families stay organized throughout the treatment course.

- **Caregiver Engagement and Behavioral History**

- Engaging caregivers early is essential to creating a supportive and personalized care experience for pediatric patients. Take time to understand the child’s needs, preferences, and relevant medical and behavioral history—including prior responses to treatment,

developmental delays, sensory sensitivities, or needle-related fears or trauma. This information can help guide decisions around communication style, scheduling, comfort measures, and coping strategies.

- Clearly communicate the full treatment plan with families, including the 14 consecutive days of infusion, what to expect during each visit, and the timing and purpose of required lab monitoring to assess treatment tolerance and response. Explain procedures in plain language, offer opportunities for questions, and reinforce information in writing when possible.
- Involve caregivers as active partners in the child's care plan and decision-making process. Their insights and advocacy can help anticipate challenges, reinforce preparation at home, and provide emotional support that enhances the child's comfort and cooperation throughout the treatment course.

- **Vascular Access Planning**

- Collaborate with the care team and the child's caregivers to determine the most appropriate vascular access for the full course of treatment, balancing the risks of longer-dwelling devices with the potential distress of daily placement.
- Infusion teams and referring providers should collaborate early to determine the most appropriate vascular access strategy for each patient, with consideration of access reliability, patient comfort, and the need to complete infusions daily without interruption.

- **Pre-Visit Orientation and Comfort Items**

- Whenever possible, schedule time for the child and their caregivers to visit the infusion center ahead of the first appointment. A brief walkthrough of the space and an opportunity to meet key staff members can help reduce anxiety, build familiarity, and create a sense of safety and routine before treatment begins.
- Encourage families to bring comfort items from home, such as a favorite blanket, stuffed animal, or small toy. These familiar objects

can provide emotional grounding and help the child feel more at ease during procedures. Depending on the child's age and preferences, comfort may also come from books, music, or a tablet with favorite shows or games. Creating a personalized, supportive environment can make a meaningful difference in how the child experiences treatment.

- **Facility Readiness**

- **Clinical Equipment**

- Consider assembling a pediatric-specific reaction kit to ensure necessary medications and supplies are readily available, such as appropriately sized syringes to accurately measure small volumes and a pediatric-dose epinephrine autoinjector.
    - Facilities administering infusions to pediatric patients should have appropriately sized monitoring equipment readily available. This includes a pediatric pulse oximeter, blood pressure cuffs in multiple sizes (infant, child, and small adult), and a multi-route thermometer capable of accurately measuring temperature via oral, axillary, or temporal methods based on the child's age and condition. Using age- and size-appropriate equipment is essential for obtaining accurate vital signs and safely monitoring pediatric patients before, during, and after infusion therapy.

- **Infusion-Related Reaction Preparedness**

- Ensure that medication orders for managing infusion-related reactions are available in pediatric, weight-based doses. If your facility uses a standing order protocol for treating infusion reactions, confirm that a pediatric-specific protocol is in place. If not, obtain patient-specific orders from the prescriber.
    - All PRN orders—whether protocol-driven or individually prescribed—must include clear indications, dosing parameters, frequency, route, and administration guidelines to meet the requirements of a valid PRN order.

- The Pediatric Endocrinology Society strongly recommends that infusion nurses administering teplizumab complete Pediatric Advanced Life Support (PALS) training. Even for infusion centers without medications or equipment necessary to carry out the full PALS clinical assessment and intervention algorithms—such as advanced airway tools, defibrillators, or ACLS medications—PALS training remains valuable. It equips nurses to recognize early signs of decompensation, initiate appropriate first-line interventions, and coordinate timely escalation of care. The foundational elements of PALS—focused on systematic assessment, early identification of deterioration, and effective team-based response—enhance preparedness and promote safer outcomes for pediatric patients in outpatient infusion settings.
- Conduct regular staff training that includes simulation-based exercises involving pediatric scenarios to ensure clinical teams are prepared to recognize and respond to pediatric-specific emergencies. These simulations should include clear role assignments, such as monitoring vital signs, administering medications, calling EMS, and documenting the event—along with, when possible, designating a team member to support and communicate with the child's parent or caregiver. This approach strengthens team coordination and promotes compassionate, family-centered care.

- **Welcoming Environment**

- Designate a pediatric-friendly infusion space with colorful decor, interactive elements, and comfortable seating—including options that support movement or flexibility during longer infusions.
- Incorporate visual and playful design features, such as wall art, ceiling visuals, and developmentally appropriate toys to create a welcoming environment and reduce anxiety. These elements can double as built-in distraction tools, like an “I-Spy” game, to engage children during procedures and make the experience more positive.

- Consider incorporating a theme to the room to help children orient to the space and reduce fear (eg, “Superhero Suite” or “Butterfly Bay”).
- If space allows, provide private rooms to accommodate family members and reduce stress for the child.
- Incorporate therapeutic play by using dolls, stuffed animals, and toy medical equipment to help children understand the infusion process in a non-threatening way.
  - Develop infection control policies to ensure that these supplies are thoroughly and adequately disinfected between patients.
- If a child experiences significant distress, consider involving a behavioral health specialist or child life specialist.

## **II. During the Visit: Comfort, Confidence, and Emotional Support**

### **● Supportive Scheduling**

- Build additional time into the schedule for pediatric appointments to allow for one-on-one interaction with the child and family at a slower, child-friendly pace. This extra time supports acclimation, encourages engagement in education, and helps reduce anxiety.
- Assign a primary care team consisting of two nurses to provide consistent care for the child throughout the 14-day treatment course. This approach increases the likelihood that at least one familiar nurse is available each day, helping to build trust and comfort over time.
- If assigning a dedicated team is not possible, communicate with the child’s caregivers in advance to set clear expectations and ensure continuity through consistent updates, introductions, and planning for each visit.

- **Distraction Techniques**

- Incorporate distraction techniques to reduce anxiety and improve cooperation during IV placement. Younger children often respond well to visual or interactive distractions, while older children may prefer having a choice between active (eg, tablet games) and passive (eg, videos) options. Casual conversation, humor, and caregiver involvement can enhance comfort. Encourage families to bring familiar comfort items, such as a favorite toy, blanket, or device, and offer age-appropriate entertainment options in the infusion space, including books, tablets, toys, video games, or TVs with streaming services.
- Incorporate breathing exercises and guided imagery as additional tools to support relaxation and reduce anxiety. These techniques can be especially helpful for children who respond well to verbal cues or mindfulness-based strategies. Simple, age-appropriate prompts—like imagining blowing up a balloon or floating on a cloud—can help shift focus and promote a sense of calm before or during procedures. These strategies can also be taught to caregivers, empowering them to reinforce calming routines at future visits.

- **Normalize Needle-Fear**

- The Infusion Access Foundation has resources designed to support kids with needle anxiety
  - *Mindfulness Guide for Kids* – A kid-friendly resource with simple breathing and visualization exercises to promote calm before procedures.
  - *Kinda Scared of Needles? That's Okay!* – A reassuring guide that validates needle fear while offering tips and tools for getting through it with confidence.

- **Minimize IV Discomfort**

- **Vapocoolant Spray** – A fast-acting spray that cools the skin on contact, providing temporary numbing within seconds to reduce pain during needle insertion.

- **Topical Anesthetic Creams** – Medications applied to the skin 30–60 minutes before a procedure to numb the area and decrease pain sensitivity.
- **Vibrational Cryoanalgesia Devices** – Handheld tools that combine cold and vibration to block pain signals near the injection site, leveraging the gate control theory of pain.
- **Parental Presence and Rapport-Building**
  - Encourage parental or caregiver presence during infusions whenever appropriate, as their involvement can provide emotional support to the child and help reduce anxiety.
  - Build rapport with both the pediatric patient and their caregiver by using child-friendly language, demonstrating empathy, and maintaining open communication throughout the infusion process.

### **III. After the Visit: Continuity, Communication, and Feedback**

- **Discharge Instructions**
  - Before discharge, ensure the child's caregivers have received and understand instructions for recognizing and managing symptoms of cytokine release syndrome (CRS) at home.
- **Communicate with Referring Providers**
  - Coordinate with the child's referring provider to share treatment notes, including doses administered, tolerance, and any adverse reactions. Timely communication supports continuity of care and reinforces shared responsibility for the child's ongoing monitoring.
- **Collect Feedback from Families**
  - Offer families an opportunity to share feedback about their experience. This may include a brief survey, follow-up phone call, or anonymous comment form. Caregiver insights can inform



improvements in scheduling, communication, comfort measures, and overall pediatric care delivery.

Infusion center nurses and leadership play a vital role in shaping a safe, welcoming, and developmentally appropriate experience for pediatric patients and their families. By preparing thoughtfully, engaging caregivers, and adopting child-centered practices, infusion centers can build the foundation for high-quality, compassionate pediatric care.