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PEDIATRICS

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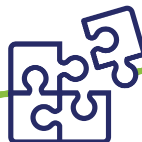

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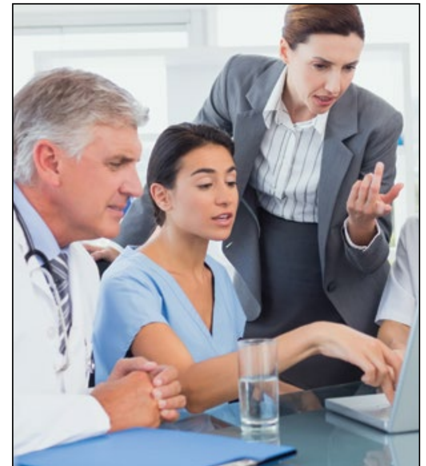

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The *Journal of Legal Nurse Consulting* (JLNC), a peer reviewed publication, is the official journal of the American Association of Legal Nurse Consultants (AALNC). We invite interested nurses and allied professionals to submit article queries or manuscripts that educate and inform our readership about current practice methods, professional development, and the promotion of legal nurse consulting within the medical-legal community. Manuscript submissions are peer-reviewed by professional LNCs with diverse professional backgrounds. The JLNC follows the ethical guidelines of COPE, the Committee on Publication Ethics, which may be reviewed at: http://publicationethics.org/resources/code-conduct.

We particularly encourage first-time authors to submit manuscripts. The editor will provide writing and conceptual assistance as needed. Please follow this checklist for articles submitted for consideration.

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Laura Grossman Nissim,
RN MS CNS LNCC

President, AALNC

"Our goals can only be reached through a vehicle of a plan, in which we must fervently believe, and upon which we must vigorously act. There is no other route to success."

– Pablo Picasso

President's Update

Dear AALNC Members,

It has been an incredibly busy time since my last note to you. We had a very successful virtual *LNC Jumpstart* program in September. We had nearly 100 participants, and our education team members, led by Karen Wilkinson - our Director of Programs, did a terrific job organizing our speakers and making the whole experience educational and supportive to the membership that attended. A follow up networking group of the JumpStart attendees was also well attended and provided leadership with lots of input about the program.

There is still so much happening in our current day-to-day lives, even with the damper of what we had hoped was a waning COVID-19 impact. As the pandemic continues to roll across the country (and the world), our hearts continue to be with those who fight on the front lines against this terrible virus. Our clinically active nurse members continue to step up and do what needs to be done to provide care, help, and often hope. They continue to care for patients whose family cannot be close. As an organization of nurses, we continue to support and lift them up with our words and actions.

Our Winter issue is one that is near and dear to this pediatric nurse's heart (25 years in clinical peds, acute→rehab). The articles presented in this issue cover a wide spread of pediatric topics, those relating to emergencies and those relating to chronic illness. Though many clinicians have asked 'how can you work with children?,' I always found their tenacity and hope a motivating force. Please enjoy reading these peer-reviewed articles that may (in your LNC future) be an important reference tool.

Speaking of tenacity, AALNC has continued to thrive despite this challenging year. We have seen an increase in our overall engagement, inclusive of both membership numbers and inquiries about where to start and what needs to be done to work as a legal nurse consultant. It is very exciting to see such interest in our work and to see our members encourage other nurses to look at our offerings for education and support. Our SIG communities have been busy as a forum for discussions surrounding practice, how to create a business, and how to work in practice areas that are unfamiliar to the participants. If you have not joined, you can sign up by visiting http://www.aalnc.org/page/sigs.

As you have heard, we are thrilled to announce AALNC's Forum in 2021 will be held virtually! As much as we all love the Forum for its opportunities for networking as well as education, the Board of Directors made the decision under an abundance of caution to provide these same amazing benefits and opportunities of our annual conference in a virtual setting next April. The program, presented over four days, will be rich with speakers and opportunities to meet other attendees in a mix of live and pre-recorded sessions. We know the Forum Committee continues to work very hard at making the program one that will be satisfying for all attendees. You can expect the same outstanding quality and experience from AALNC you have come to rely on in past years, and we cannot wait to share this new experience with all of you.

Thank you all for your membership and participation in this vibrant organization. We remain the home for all LNCs and the Gold Standard for Legal Nurse Consulting.

Laura Grossman Nissim, RN MS CNS LNCC

Editor's Note

Julie Dickinson
MBA, BSN, RN, LNCC

Editor, JLNC

Dear JLNC Readers,

These preceding months have featured a unique school semester for children across the United States (and beyond). Even without the wide-spread effects of the coronavirus pandemic, the pediatric population is a particularly vulnerable one due to their unique disease presentations, communication challenges, and limitations to providing consent. The articles in this issue explore some of these vulnerabilities and related legal issues.

The Shihabuddins present a common scenario – a teenager who presents with what seems to be an innocuous asthma exacerbation – to illustrate the importance of a thorough history of present illness, appropriate diagnostics, and questioning out-of-context symptoms. They discuss the analysis of the four elements of proof in medical negligence claims.

Zorn offers a troubling case study that highlights the nuances of a product liability case and underscores the dire consequences that result when these cases initially present as criminal behavior.

Fregia explores the presentation, diagnosis, and treatment of appendicitis in children; explains why it is subject to misdiagnosis; and provides considerations when reviewing pediatric cases involving a missed diagnosis of appendicitis.

Haney employs a pediatric case study to demonstrate the steps involved in performing a root cause analysis. This is a valuable tool for investigating adverse events, identifying opportunities for process improvement, and making system-level changes to prevent future harm to other patients.

Husted discusses three costly components of pediatric life care plans and helps legal nurse consultants (without life care planning experience) understand what areas of these life care plans could be challenged and why.

Haibeck provides an overview of childhood cancer, identifies some legal considerations when working on childhood cancer malpractice cases, and offers insights gleaned from actual legal cases.

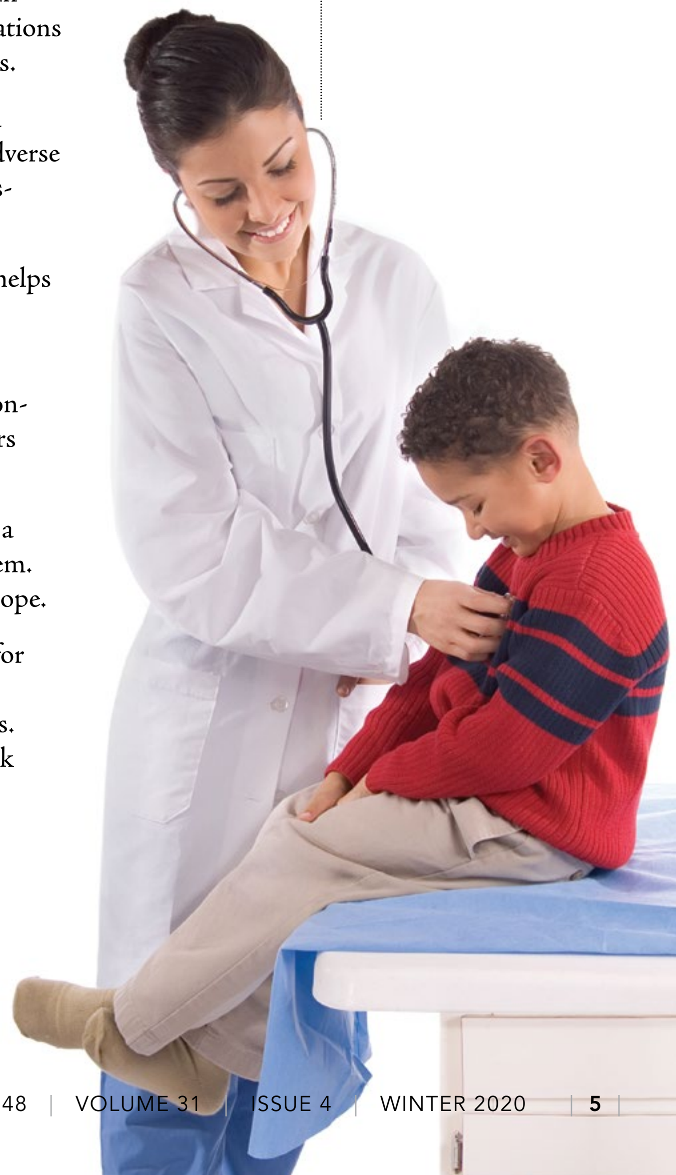
In his insightful perspective piece, Davey shares his experience working as a Guardian ad litem, giving a voice to young people in the child welfare system. He offers a poignant yet pragmatic look into his role and what gives him hope.

In this issue, I am pleased to welcome several authors who are publishing for the first time. The Editorial Committee members who worked with these authors did an outstanding job of mentoring them throughout this process. We are excited about the contributions from all of the authors, and we look forward to welcoming new and experienced authors for future issues in the new year.

Respectfully,

Julie Dickinson

Julie Dickinson, MBA, BSN, RN, LNCC



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Delayed Diagnosis of a Pediatric Respiratory Emergency

Case Illustration and Review

Courtney DuBois Shihabuddin, DNP, APRN-CNP
Bashar S. Shihabuddin, MD, MS, FAAP, FACEP

Keywords: pediatric respiratory emergences; foreign body aspiration; delayed diagnosis; negligence; missed diagnosis; misdiagnosis; medical malpractice; emergency department, asthma, bronchiolitis, croup, elements of proof in negligence claims, duty, breach of duty, causation, damages

Foreign body aspiration is an uncommon but challenging diagnosis in emergency departments. Pediatric patients presenting with respiratory complaints to the emergency department often have vague signs and symptoms that can overlap many potential diagnoses. The diagnosis of foreign body aspiration requires a high degree of suspicion and diligence in obtaining a detailed history of symptoms and events leading to the emergency department presentation. Misdiagnosis of an aspirated foreign body can lead to complications with increased patient morbidity and potentially mortality. This article presents a hypothetical case illustrating delayed diagnosis of an aspirated foreign body that lead to severe complications with a high degree of morbidity and cost to the healthcare system. The potential legal ramifications are highlighted for legal nurse consultants to apply when reviewing similar cases.

ILLUSTRATIVE CASE

A 16-year-old male was transported to an emergency department (ED) by emergency medical services with a chief complaint of "difficulty breathing and respiratory distress." Emergency medical services had responded to a baseball field to find this player sitting on the bench in respiratory distress. Emergency medical personnel noted wheezing on physical examination, so they administered albuterol and intravenous steroids

during transport. They advised the ED that the patient seemed to be improving. The patient arrived awake, alert, and able to talk in short sentences. He was unaccompanied by either parent. He reported he was sitting on the bench eating sunflower seeds and cheering on his teammate when he started coughing and felt short of breath. He endorsed a history of asthma, but he had left his rescue inhaler at home. He reported compliance with his daily scheduled inhaled steroids and oral antihistamines.

Respiratory complaints are a leading cause for ED visits in the United States and, as a whole, account for about 30 billion dollars of healthcare spending each year.

Vital signs during triage were temperature 36.6°C, heart rate (HR) 120, respiratory rate (RR) 24, blood pressure (BP) 116/80, and pulse oximetry 92% on room air. Physical examination showed a teen in mild respiratory distress with suprasternal retractions, audible wheezing with tachycardia on chest auscultation, and without abdominal distention or tenderness. The patient was administered three doses of nebulized albuterol as well as intravenous magnesium. At this point, the patient's parents arrived and were updated on his condition.

On repeat examination, his vital signs were temperature 37.1°C, HR 128, RR 16, BP 120/82, and pulse oximetry of 95% on room air. He reported feeling better and was able to speak in full sentences with some interspersed coughing. Repeat examination showed no retractions with end-expiratory wheezing, so the patient was discharged with the diagnosis of acute asthma exacerbation and prescribed a course of oral steroids.

Two days later, the patient presented to another ED with his parents with complaints of persistent cough and wheezing that improved when he used his albuterol rescue inhaler. However, he had not slept well due to the cough. He endorsed no fever, chest pain, nor runny nose, and he had not played baseball or done any other activities since his initial ED visit. He was still taking the oral steroids prescribed at the first visit.

Vital signs in triage were temperature 37.5°C, HR 100, RR 16, BP 110/70, and pulse oximetry 91% on room air. Physical exam showed no acute distress but intermittent coughing, decreased air entry to the right lung field, and wheezing to the left lung field. Three doses of nebulized albuterol and a chest radiograph were ordered. The patient endorsed feeling better after the albuterol was administered, and repeat examination showed improved air entry to the right lung field with end-expiratory wheezing. The chest radiograph showed a possible right middle lobe pneumonia, so the patient was discharged with a prescription for oral antibiotics and instructions to continue his initial steroid course.

Five days after his second ED visit, the patient was brought by emergency medical services to a third ED for respiratory distress. Intravenous steroids and nebulized albuterol were administered in route, as he had markedly decreased air entry on initial assessment. He failed to improve with these interventions and arrived at the ED in extreme respiratory distress with altered mental status. He responded only to vigorous or painful stimuli with groans and had markedly decreased air entry bilaterally.

Initial vital signs were temperature 38.4°C, HR 54, RR 30, BP 88/36, and pulse oximetry 86% on room air, which increased to 91% on 15 liters per minute of supplemental oxygen through a facemask. Intravenous fluids were administered, and he was placed on non-invasive positive-pressure ventilation (e.g., BiPAP, CPAP, etc.). Arterial blood gas results were as follows: pH 7.1, pCO2 70, and pO2 42. The decision was made for endotracheal intubation, after which a chest radiograph showed diffuse opacities to the right lung extending to areas of the left lung. The patient was admitted to the intensive care unit but continued to have worsening acidosis and organ dysfunction, so he was placed on extracorporeal membranous oxygenation (ECMO). A bedside bronchoscopy was performed, and fragments of seeds were found and removed from the right mainstem bronchus. The lung tissue was irrigated, and specimens sent for microbiological analysis. The patient stabilized but was continued on ECMO for another five days, after which he transitioned off and slowly continued to improve. After his 14-day admission, he was discharged to an inpatient rehabilitation center, where he required a 30-day stay for physical and occupational therapy. He would require months of continued outpatient therapy following discharge.

DISCUSSION

Respiratory complaints are a leading cause for ED visits in the United States and, as a whole, account for about 30 billion dollars of healthcare spending each year (Kim et al., 2015; Nurmagambetov et al., 2018; Yaghoubi et al., 2019). Asthma is the most common respiratory illness in the United States, and asthma exacerbations account for the majority of ED visits for respiratory complaints (Yaghoubi et al., 2019). Most asthma exacerbations respond very well to albuterol, either nebulized or inhaled, and sometimes require short courses of oral steroids. Asthma exacerbations are often due to acute

There is a wide variation in the presenting symptoms of foreign body aspiration, ranging from no symptoms at all to severe respiratory distress, asphyxia, and death.

viral respiratory infections or environmental factors (Busse et al., 2010; Wark et al., 2018).

Rarely, severe asthma exacerbations result in complications with resultant morbidity and mortality. Those are often due to poorly controlled asthma, with poor compliance to maintenance medications (Dougherty & Fahy, 2009; Fernandes et al., 2014). Asthma exacerbations requiring mechanical ventilation, endotracheal intubation, or ECMO are more common in older children and young adults who underestimate their own symptoms and thus present to the ED with severe respiratory distress that does not improve with initial therapy (Dougherty & Fahy, 2009). Initial acute therapy for asthma exacerbations depends on the severity of symptoms and the contributing factors but mainly consists of nebulized albuterol and oral or intravenous steroids. Moderate exacerbations may require intravenous magnesium sulfate or other adjunct therapies (Franzese, 2015).

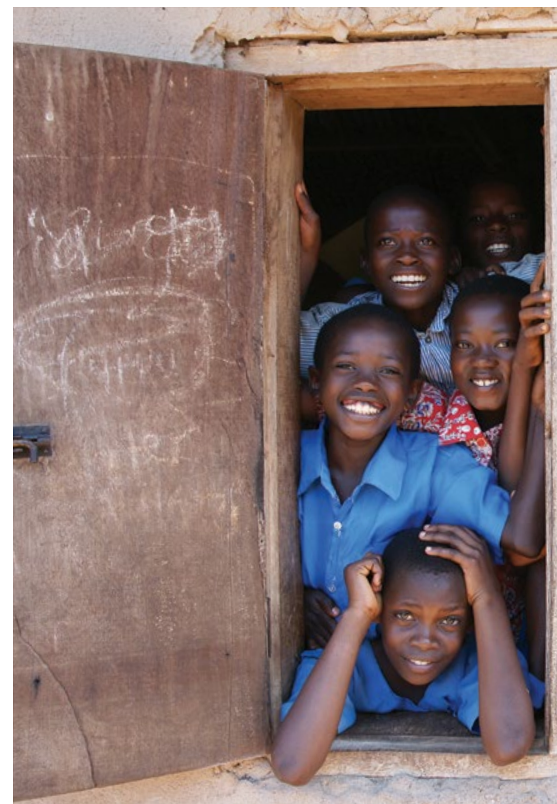
Bronchiolitis is the leading cause for ED visits due to respiratory complaints every winter (Hasegawa et al., 2014). It is a disease of infancy consisting of an acute viral illness causing fever, cough, and wheezing in children below the age of two years (Florin et al., 2017). Typically, it is a self-limiting disease, but complications occur in young infants (less than 6 months of age) and those with underlying medical conditions. For example, infants with a history of prematurity are at higher risk of apnea due to bronchiolitis than other children of the same age (Mansbach et al., 2015). Treatment is supportive, and hospitalization is required for supplemental oxygen or signs of dehydration (Ralston et al., 2014). Severe respiratory distress or apnea with bronchiolitis requires non-invasive positive-pressure ventilation or invasive mechanical ventilation with endotracheal intubation (Ralston et al., 2014). However, even severe bronchiolitis most commonly resolves with no long-term complications to the patients.

Croup is another viral illness that is common in younger children but can occur in older children and young adults (Johnson, 2016). It is often a self-limiting disease, but moderate to severe episodes with respiratory distress are often treated with a single dose of oral steroids and nebulized racemic epinephrine (Duman et al., 2005). Rarely, severe respiratory distress in the context of croup requires non-invasive positive-pressure ventilation, administration of a helium-oxygen mixture, or invasive mechanical ventilation with endotracheal intubation (Moraa et al., 2013). Patients with severe episodes most often improve with no long-term complications.

Foreign body aspirations are common in young children but can occur at any age and pose a diagnostic challenge for clinicians when there is not a clear history of foreign body ingestion (Cramer et al., 2020). Most ingested foreign bodies are swallowed and pass through the alimentary system without complications (Conners & Mohseni, 2020). However, aspiration into the respiratory system may occur and can result in varying symptoms and complications (Conners & Mohseni, 2020). Although toys, coins, and small household items may be aspirated, food items account for most cases of nonfatal choking episodes in the United States (Green, 2015). Younger children and those with developmental delays or anatomical abnormalities are at increased risk of aspiration, which may result in significant airway obstruction.

There is a wide variation in the presenting symptoms of foreign body aspiration, ranging from no symptoms at all to severe respiratory distress, asphyxia, and death (Kashif et al., 2016). Symptoms can be vague and overlap with other disease etiologies that are more common in the patient's age group, such as bronchiolitis or asthma (Patel & Shihabuddin, 2013). In general, a patient presenting with coughing and wheezing after a choking episode on any foreign body should be evaluated with bronchoscopy (Kramer et al., 2015).

The above case illustrates how vague symptoms in children can be associated with multiple diagnoses, placing



an increased burden on treating clinicians to determine the exact cause of the symptoms. This requires a high degree of diligence, a detailed history, a thorough physical exam, and careful documentation. In the case illustrated above, the patient had a history of asthma. During the initial ED visit, the patient was treated according to his symptoms and felt improved. Imaging is seldom obtained in acute pediatric asthma exacerbations, particularly when there is response to medical treatment. However, when a historical element indicates a possible infectious etiology or, as in the case above, foreign body aspiration, chest imaging is warranted. The first treating physician failed to consider the patient's proffered history of choking while eating sunflower seeds. The physician only considered asthma as the cause of the patient's symptoms, and even though the physician adhered to the standard treatment protocols for asthma, a chest radiograph would have been indicated during that visit given the possible foreign body aspiration. While chest imaging may have not revealed any abnormalities during that visit, the treating physician would have been in compliance with the standard of care by ordering it given the history of a possible foreign body aspiration.

When the patient presented to the second ED with worsening symptoms, the treating provider obtained a chest x-ray but failed to consider further diagnostics and other possible diagnoses in the absence of any specific upper respiratory infection (URI) symptoms leading to the pneumonia. These two treating physicians may have not considered foreign body aspiration as a diagnosis, even after obtaining the history that the patient was eating sunflower seeds when his symptoms started. However, case analysis must include whether the patient mentioned a choking episode that preceded symptom onset and how the patient responded to inquiries about such a preceding acute respiratory event (e.g., choking, trauma, vaping, etc.). If the patient did disclose a history of choking followed by coughing, then in the context of physical exam findings of wheezing (even with his history of asthma), foreign body aspiration could not be excluded without further diagnostics.

LEGAL IMPLICATIONS OF A DELAYED DIAGNOSIS OF A PEDIATRIC RESPIRATORY EMERGENCY

"A person asserting negligence has the burden of establishing that the opposing party had a duty to exercise reasonable care, the party breached that duty, and this breach caused injury" (Lorenz, 2020, p. 88).

Duty

"The existence of a legal duty is a question of law determined by the court" (Lorenz, 2020, p. 90). When a patient presents to the ED, a voluntary relationship is initiated between the patient and the treating healthcare provider. Once that relationship is initiated, "a medical provider's duty is defined by the applicable standard of care in that field" (Lorenz, 2020, p. 91). The standard of care is what a reasonably prudent, similar healthcare provider would do in the same or similar circumstances. Legal nurse consultants conduct research to identify evidence of the applicable standard of care that was in effect at the time of the events in question. In the illustrative case, various standard of care resources may include the American College of Emergency Physicians; the American Academy of Pediatrics and its two publications – *Pediatrics* and *Pediatrics in Review*; other medical specialty organizations; institutional policies and procedures; published guidelines, protocols, and recommendations; medical journals and textbooks; and expert witness opinion and testimony.

In this case, a legal physician-patient relationship existed between the young man and each of the hospitals' physicians. The physicians owed a duty to the patient to ensure he was evaluated based upon his history and symptoms and provided with diagnostics that were reasonable to his history, presentation, and symptomatology.

Breach of Duty

Breach of duty occurs when the healthcare provider's care falls below the acceptable standard of care owed to the patient. This can occur as either an omission or commission. The applicable standards of care are used to determine whether a provider has satisfied or breached the duty of care owed to the patient.

The first ED physician failed to include the history of choking in his differential diagnosis formulation and considered only asthma as the cause of symptoms. The physician who treated the patient during the second ED visit demonstrated the following breaches in standards of care:

1. Failure to investigate how a healthy 16-year-old athlete suddenly

developed pneumonia without any URI symptoms;
2. Failure to illicit a complete medical history, particularly a history of choking;
3. Failure to obtain imaging; and
4. Failure to obtain specialist consultation.

The aforementioned standard of care research may also help identify potential experts who are similar healthcare providers to the defendants to testify on the applicable standard of care and how the defendants' (in)actions compared.

Causation

Causation is traditionally the most difficult aspect of medical negligence to understand and prove in court. This third element requires the plaintiff to show that the defendant's negligence actually caused the injury and that the injury was reasonably foreseeable. When looking at causation, the legal nurse consultant must consider the following:

> Did the breach of duty cause the injury or damage? Was it a proximate cause or a less substantial factor? Could the injury have been caused by something else? Did the breach of duty cause all or only part of the plaintiff's injury? If only part, which part? Could the plaintiff have had the same outcome absent the breach of duty? In death cases, would the decedent have died of the disease absent any breach of duty? If so, what are the statistics on morbidity and mortality for that specific condition? (Aiken et al., 2020, p. 243)

In this case, the first treating physician failed to consider the history of choking while eating sunflower seeds. If he had included the choking episode in his differential diagnosis formation and ordered a chest radiograph, the aspiration may have been identified earlier. However, there is a possibility the chest imaging would have been negative, causing the first ED physician to rule out aspiration. The patient presented two days after the initial ED visit for a presumed worsening asthma exacerbation while on both inhaled and oral steroids and regular use of a rescue inhaler prescribed two days prior. Emergency department providers should always consider a delayed presentation of foreign body aspiration in those presenting with chronic cough and recurrent pneumonia. This is particularly true because radiologic findings may include pneumonia, bronchiectasis, and atelectasis but may not show evidence of obvious foreign body. In these instances, bronchoscopy can be both diagnostic and therapeutic (Haller et al., 2018)

As previously established, older children with asthma exacerbations tend to underestimate their own symptoms, delay seeking care when initial therapy is ineffective, and thus require mechanical ventilation, endotracheal intubation, or ECMO when they present to the ED in respiratory distress. As this is a common reason for exacerbation in this patient's age group, it is easy to understand why the ED physicians assumed he had an asthma exacerbation and treated him accordingly. The second ED physician should have known the importance of a complete and thorough medical history. After obtaining a history of a preceding choking event and seeing a possible right middle lobe pneumonia on radiograph in the absence of any upper respiratory symptoms, the provider should have ordered a bronchoscopy to evaluate for a foreign body. Had a bronchoscopy been ordered and the seeds removed, the patient's further deterioration, third ED visit, intubation, ECMO, lengthy hospitalization, rehabilitation stay, and outpatient therapy could have been avoided.

Damages

Damages are monetary amounts awarded to the plaintiff as compensation for injuries caused by the defendant's negligence. Damages can be divided into several categories, which are:

1. **Special Damages:** These are quantifiable economic losses (such as past and future medical bills, past and future lost wages, and out-of-pocket expenses) that are incurred as a result of the negligence.
2. **General Damages:** These are non-economic losses (such as pain and suffering and loss of function) sustained as a result of the negligence. Ultimately, a jury determines what monetary amount is appropriate to award the plaintiff for general damages.
3. **Punitive Damages:** These "are a monetary figure awarded to the plaintiff and are intended to punish the defendant for its egregious behavior and deter similar conduct by others in the future" (Lorenz, 2020, p. 97). Punitive damages are available only in some jurisdictions.

In this case, the lack of thorough processing through the differential diagnosis list (by the first ED physician) and the lack of exploration into the cause of worsening respiratory distress (by the second ED physician) resulted in severe respiratory distress that required life-saving interventions, a 14-day hospitalization, a 30-day admission to a rehabilitation facility, and months of outpatient physical and occupational therapy. These resulted in significant medical bills, future care needs, and pain and suffering.

SUMMARY

Pediatric patients presenting with respiratory complaints to the ED often have vague signs and symptoms that can overlap many potential diagnoses, and the diagnosis of foreign body aspiration requires a high degree of suspicion. In these cases, careful attention to the elicited history, phys-

ical exam findings, diagnostic testing, differential and final diagnoses, the patient's response to interventions, and documentation is paramount to a thorough analysis of the four elements of proof in these medical negligence claims.

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Pediatric Product Liability Case

Elizabeth Zorn, RN, BSN, LNCC

Keywords: pediatric product liability, pharmaceutical product liability, senna, laxative-induced dermatitis, alleged child abuse

FACTS

JMM was born on March 21, 2005. He resided at home with his dad, younger brother, and mom, Ms. Martinez. In July 2006, Ms. Martinez purchased a bottle of Little Tots Laxative Drops ("Little Tots"), an over-the-counter medication marketed to the public as a constipation remedy for children. The bottle she purchased had an expiration date of May 2008. The packaging instructions for this product did not include any warnings about the potential for skin irritation or burns when administered to infants or toddlers in diapers.

On December 10, 2007, Ms. Martinez administered a dose of Little Tots to JMM to relieve his constipation. When the first dose did not do anything, Ms. Martinez administered a second dose, put a diaper on JMM, and put him to bed. At some point during the night, JMM had an episode of diarrhea. In the morning when Ms. Martinez removed his diaper and cleaned up the diarrhea, she noticed redness in his groin and buttocks area that she thought was diaper rash. She showered him and attempted to treat the area with petroleum jelly and diaper rash cream.

By the afternoon, the redness had turned to blisters that popped. His mom called an ambulance and had him transported to Strong Memorial Hospital ("SMH"). Ms. Martinez informed the ambulance crew, doctors, and nurses at SMH that JMM had what she thought was a severe case of diaper rash possibly due to the laxative drops she had administered the prior day.

SMH Emergency Department providers were concerned JMM might have a scald injury. A burn consultant evaluated the child, documenting:

> The mother states the child was constipated the day before admission. She gave him a laxative. The patient had a large bowel movement and created quite a mess at around 10:00 to 10:30 in the morning. The patient was reportedly put into the shower. An hour later, after he had his diaper on, he was complaining of pain. She took down the diaper and there was blistering on his buttocks region. She initially treated it with an antibiotic ointment. The blistering progressed. The patient was brought to the ED. The patient's family was concerned he may have had 'diaper rash.' There was concern the patient may have a

scald injury and a burn consultation was obtained. The patient's clothing did not catch fire. The mother was in attendance of the child during the time period.

The consultant documented the following exam findings:

Has blistering involving the coccygeal region and bilateral buttock region. The skin around the anus is spared. The skin folds in the infra-gluteal crease and proximal posterior thigh were not spared and were burned confluently. The dermis is pink with quick capillary refill time. There was no evidence of burns elsewhere on the child's body.

His impression was "second degree scald burn to the right and left buttocks," noting:

In my opinion, the pattern of injury is consistent with an immersion. It is not consistent with the story the child could have gotten scalded in the shower. There would be more splash marks and more of a dripping pattern. It is more likely the patient was immersed in hot water. I do not believe this is an allergic reaction to the ointment that was applied. No other signs of an allergic reaction.

JMM was admitted to the hospital for wound care and pain control with codeine and ibuprofen. Surgical intervention was not necessary. A Child Protective Services (CPS) investigation was initiated with a plan to keep the child hospitalized until "we can determine whether or not the patient can return back home to safety." On December 14. 2007, CPS agreed to release the child home in the care of his dad.

CRIMINAL PROCEEDINGS

On December 11, 2007, while in the hospital with JMM, Ms. Martinez was arrested and charged with various misdemeanors in Rochester City Court. Those charges were eventually replaced by criminal felony charges brought against her in a Monroe County Court and a child neglect proceeding brought against her in Monroe County Family Court.

On December 12, 2007, an order of protection was issued, which ordered Ms. Martinez to refrain from contact with her children. She was not only ordered to refrain from any contact with JMM but was further ordered to have no contact with her other child who was 11 ½ months old at the time and still being breast-fed. She was forced to leave her home from December 11, 2007 through April 24, 2008 while the charges were pending. For the first two months, she was not allowed any contact with JMM. For the next two months, she was allowed only supervised visits. As a result of being charged with child abuse, Ms. Martinez' name was added to the New York State Central Register of Child Abuse ("Register").

Ms. Martinez' was assigned a public defender who located a 2001 article published in Pediatrics, the official journal of the American Academy of Pediatrics, entitled "Laxative-Induced Dermatitis of the Buttocks Incorrectly Suspected to be Abusive Burns." Her public defender contacted the lead author, Dr. James M. Leventhal from Yale University School of Medicine, who signed an Affidavit in which he opined the senna-containing laxative drops caused JMM to suffer severe contact dermatitis, redness, chemical burns, blistering, and sloughing of the skin in the buttocks and genital area. On April 24, 2008, all charges against Ms. Martinez were dismissed based upon Dr. Leventhal's expert opinion that Ms. Martinez did not harm her child; rather, the child's burns were caused by the Little Tots laxative.

CIVIL PROCEEDINGS AGAINST THE MANUFACTURER OF LITTLE TOTS

Ms. Martinez subsequently consulted an attorney at Faraci Lange, LLP in Rochester, NY who conducted a thorough investigation of the incident with support from one of the firm's in-house legal nurse consultants (LNCs). They reviewed the medical literature for similar incidents and consulted with the Yale expert regarding the active ingredient of Little Tots' laxative. This expert concluded the child's apparent burn injury was uncharacteristic of a dunk scald. He opined that children who are dunked are held under the armpits, and their feet, legs, and buttocks are scalded. Based upon this opinion, Ms. Martinez' attorney commenced a formal lawsuit in May 2009.

THE COMPLAINT

Liability

The plaintiff alleged in her complaint that the combination of the active ingredient in Little Tots (senna) together with the stool (which was against the infant plaintiff's unprotected skin by his nighttime diaper) caused significant contact dermatitis, redness, chemical burns, blistering, and sloughing of the skin in the buttocks and genital area. Further, Ms. Martinez alleged that,

He opined the senna-containing laxative drops caused JMM to suffer severe contact dermatitis, redness, chemical burns, blistering, and sloughing of the skin in the buttocks and genital area.

They contacted Child Protective Services to report their suspicion of child abuse because the Little Tots' packaging lacked warnings of its hazards.

despite describing to SMH providers the Little Tots product she had given JMM, they contacted CPS to report their suspicion of child abuse because the Little Tots' packaging lacked warnings of its hazards.

First cause of action: Strict Products Liability

Plaintiffs alleged the Little Tots laxative product was defective in its design, manufacture, testing, inspection, labeling, warning, instructions, packaging, distribution, marketing, and selling at the time it left the manufacturer.

Plaintiffs asserted the defendants owed a duty to both the infant plaintiff and the plaintiff (the mom) to warn:

a) of the potential for burns and contact dermatitis that they knew or should have known could be caused by the mixture of watery stool with the ingredients of their product; and
b) users to take precautions to avoid any prolonged contact between this mixture and the child's skin.

Plaintiffs also asserted defendants had a duty to warn consumers regarding the potential for health care providers to mistake assumed burns and contact dermatitis caused by its product for scalding burns caused by child abuse, which defendants knew or should have known from previously published case reports in the medical literature.

Second cause of action: Breach of Warranty

Plaintiffs alleged that defendants breached their express warranty to the medical community, general public, and plaintiffs that its over-the-counter medicine Little Tots was of merchantable quality, safe, appropriate, free of defects, fit for its intended purpose, and presented no unreasonable risks of harm to the purchaser and user.

Plaintiffs also asserted the purchasers and users of Little Tots, including plaintiffs, reasonably relied upon such warranties and representations and reasonably expected the drug was fit for its intended purpose and foreseeable use.

Damages

Infant plaintiff

JMM suffered second-degree burns requiring hospitalization. He was relatively comfortable throughout his hospitalization and did not complain of significant pain or discomfort. The infant plaintiff fully recovered from his burns, suffering no permanent injuries once his burns healed during the weeks following the incident.

JMM also suffered emotionally because of the 4 ½-month separation from his mom until dismissal of the criminal charges. During her absence from the home, the infant plaintiff was deprived of the comfort, nurturing, and care of his mother. Upon being reunited with his mom, he became more introverted and unwilling to leave her side even to play with other children. Counseling at school eventually improved JMM's separation anxiety.

Ms. Martinez

During the almost five months Ms. Martinez had to leave her home, she was deprived of her relationship with her two children. In addition, her reputation in her community was substantially and irreparably damaged by false accusations of child abuse during the time her name remained on the Register. While she was pregnant with her third child, Ms. Martinez initially took steps to have her name removed from the Register but missed a hearing because she experienced early contractions in the weeks prior to her daughter's birth. After her daughter was born, she attempted to reschedule a hearing, but CPS denied her request.

Ms. Martinez' attorney in the civil action wrote to CPS requesting they remove Ms. Martinez from the Register. They declined. Her attorney then filed an Article 78 proceeding to appeal the agency's decision. The day before the hearing was scheduled, the Judge held a conference in chambers. He advised the county attorney and assistant attorney general he was going to grant Ms. Martinez' petition, so he admonished them to resolve the issue with CPS. They subsequently entered an agreement, removing her name from the Register. Unfortunately, while on the Register for almost seven years, Ms. Martinez, who is a teacher's aide, was ineligible for many types of jobs involving children or other vulnerable groups.

SETTLEMENT

This matter settled for a total of $25,000 with the following breakdown: $5,000 to the mom for reputational damages and $20,000 to the infant plaintiff for his pain and suffering and emotional harm. JMM's medical expenses were paid by Medicaid, so the County asserted a lien against the proceeds of the settlement. Payment was made to the County in the amount of $4,014.43 out of the child's recovery to satisfy the outstanding Medicaid lien. The settlement amount reflected the limited nature of provable damages.

Given this, Ms. Martinez' attorney waived all of their fees.

ROLE OF THE LNC

The role of the in-house LNC in this matter included:

- Attending the initial client interview to gather facts;
- Identifying and summarizing the pertinent medical records of the infant plaintiff;
- Researching the medical literature regarding injury patterns seen with dunk scalds as well as case reports of injuries in diapered infants and toddlers given laxatives containing senna;
- Preparing a package of materials for the expert; and
- Conferencing with the expert and the attorney.

For the mom's story in her own words, with commentary by her attorney, see https://www.youtube.com/watch?v=et_ChnGyUn8

For more information about working on product liability cases, see:

Garnett, V. W. & Newsome, S. (2020). Pharmaceutical and medical device product liability litigation. In J. Dickinson & A. Meyer (Eds.), *Legal nurse consulting principles and practices* (4th ed., pp. 293-320). New York, NY: Routledge.

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When a Tummy Ache Is Not Just A Tummy Ache

Missed Diagnosis of Pediatric Appendicitis

Cybil Fregia, RN, MSN, CPNP-PC

Keywords: Appendicitis, Abdominal Pain, Pediatrics, Malpractice, Missed Diagnosis, Misdiagnosis, Medical Errors

Children are subject to misdiagnosis due to atypical presentations of many illnesses, including appendicitis. This article discusses the presentation, diagnosis, and treatment of appendicitis and provides key considerations for the legal nurse consultant's analysis of the medical records in a case involving a missed diagnosis of pediatric appendicitis.

PEDIATRICS IN GENERAL

Pediatrics is a special population. Some may think of kids as "little" or "mini" adults; however, nothing could be further from the truth. Pediatrics is a specialty. These little humans are subject to misdiagnosis due to atypical presentations of many illnesses. This article will assist the legal nurse consultant (LNC) in evaluating a possible misdiagnosis of a child with abdominal pain.

According to a study done by The Doctors Company (the country's largest physician-owned medical malpractice insurer), "missed, failed or wrong diagnosis is the top allegation in claims involving children ages one month to seventeen years, and is also the second-most common allegation in claims involving infants less than one month old" (Landi, 2019, para. 2). Unfortunately, medical errors are more common than would be ideal. Medical errors or errors in diagnosis occur when

a "diagnosis is unintentionally delayed (sufficient information was available earlier), wrong (another diagnosis was made before the correct one), or missed (no diagnosis was ever made)…" (Singh et al., 2010, p. 71).

APPENDICITIS IN PEDIATRICS

Appendicitis is the inflammation of the appendix, a finger-shaped pouch present at the lower right side of the abdomen. "Appendicitis causes pain in [the] lower right abdomen. However, in most people, pain begins around the navel and then moves. As [the inflammation] worsens, appendicitis pain typically increases and eventually becomes severe" (Mayo Clinic Staff, 2019, para. 2). According to UpToDate, "abdominal pain is one of the most common complaints in childhood and one that frequently requires urgent evaluation in the office or emergency department" (Neuman, 2019, para. 2). The challenge is for the provider to identify the patients who have the common "tummy ache" versus the patient with a potentially life-threatening illness.

Presentation

There are three clinical features in appendicitis: pain to the right lower quadrant of the abdomen, guarding of the site of pain, and pain that migrates from the right lower quadrant to the periumbilical area. At least one of these symptoms is "frequently absent, particularly in younger children" (Neuman, 2019, para. 8). Therefore, clinicians should consider the diagnosis of appendicitis when a child presents with a history of abdominal pain and vomiting with or without fever or focal abdominal pain (Neuman, 2019, para. 8). These vague symptoms may be the only indication of appendicitis and therefore require a thorough history and physical.

Diagnosis

The ambiguous presentation compounded with the fact that children cannot oftentimes accurately communicate their symptoms makes diagnosis difficult. In these instances, parents or guardians are key in assisting with the proper diagnosis. Family members and caregivers are essential in providing details regarding the child's health status. They can ascertain subtle changes in the child's behavior as well as note subtle signs and symptoms that may assist in the child's care. Diagnosing appendicitis in children is a clinical diagnosis. A complete physical exam is very important to the diagnosis. When examining a child with abdominal pain, appendicitis should be ruled out. The classic findings of appendicitis are:

- anorexia;
- periumbilical pain (early);
- migration of pain to the right lower quadrant (often within 24 hours of onset of symptoms);
- pain with movement such as walking or shifting position in bed or on a stretcher;
- vomiting (typically occurring after the onset of pain);
- fever (commonly occurring 24 to 48 hours after onset of symptoms);
- right lower quadrant tenderness; and
- signs of localized or generalized peritoneal irritation such as:
  - involuntary muscle guarding with abdominal palpation,
  - positive Rovsing sign (pain in the right lower quadrant with palpation of the left side),
  - obturator sign (pain on flexion and internal rotation of the right hip, which is seen when the inflamed appendix lies in the pelvis and causes irritation of the obturator internus muscle),
  - iliopsoas sign (pain on extension of the right hip, which is found in retrocecal appendicitis), and
  - rebound tenderness (elicited by the examiner placing steady pressure in the right lower quadrant for 10 to 15 seconds and then suddenly releasing the pressure; a positive finding consists of increased pain with removal of pressure) (Wesson & Brandt, 2020, para. 12).

Because it is often difficult to elicit the Rovsing, obturator, and iliopsoas signs in young children, their absence on exam does not rule out the diagnosis of appendicitis.

In addition to the physical exam and history, two commonly used scoring systems are available to assist in the diagnosis: the Pediatric Appendicitis Score (PAS) and the modified Alvarado score. "The utility of these scores lies in their ability to categorize patients into groups that are low, moderate, and high risk of appendicitis. However, they have limited ability to identify patients who warrant appendectomy" (Wesson & Brandt, 2020, p. 36).

The PAS is used to classify children with abdominal pain on a 10-point scale. The tool utilizes the child's history, physical exam, and laboratory results to assist in diagnosing appendicitis. The clinician takes into account the following symptoms:

The challenge is for the provider to identify the patients who have the common "tummy ache" versus the patient with a potentially life-threatening illness.

- right lower quadrant (RLQ) tenderness to cough, percussion, or hopping [No=0, Yes= +2]
- anorexia [No=0, Yes= +1]
- fever (temperature >38.0° C/100.4° F) [No=0, Yes= +1]
- nausea or vomiting [No=0, Yes= +1]
- tenderness over the right iliac fossa [No=0, Yes= +2]
- leukocytosis (white blood cell [WBC] count >10,000) [No=0, Yes= +1]
- neutrophilia (absolute neutrophil count >7,500) [No=0, Yes= +1]
- migration of pain to RLQ [No=0, Yes= +1] (MD+Calc, 2020, Table 1)

According to this tool, a score of less than four is low risk for acute appendicitis and does not warrant imaging (ultrasound or magnetic resonance imaging [MRI] scan) and other causes of abdominal pain should be considered. A score of four to six is equivocal and suggests that imaging may be helpful in pediatric patients. A score above six is high risk and warrants a surgical consult. "Imaging may still be pursued, but the patients should only undergo ultrasound prior to a surgical consult" (MD+Calc, 2020, Table 1). Any patient who is considered not low risk will need "nil per os" (NPO) status, intravenous (IV) fluids, analgesia for pain, and imaging or surgical consultation (MD+Calc, 2020, Table 1).

The modified Alvarado "scoring system is useful as a first line, rapid, reliable and economic way of early preoperative diagnosis of acute appendicitis in children and in reducing the incidence of negative [appendectomy] rate" (Shera et al., 2010, p. 290). The Alvarado score calculation is used to "identify patients with a very low likelihood of acute appendicitis so as to triage them to evaluation for other causes of abdominal pain. Patients with a high Alvarado score should be further evaluated with imaging prior to treatment" (Martin & Kang, 2019, Table 1). The current modified Alvarado scoring system is:

- migratory right lower quadrant pain (1 point)
- anorexia (1 point)
- nausea or vomiting (1 point)
- tenderness in the right lower quadrant (2 points)
- rebound tenderness in the right lower quadrant (1 point)
- fever >37.5°C (>99.5°F) (1 point)
- leukocytosis of WBC count >10 x 109/liter (2 points) (Martin & Kang, 2019, Table 1)

The score is obtained by adding up all the symptom values with a maximum score of nine. The higher scores are indicative of a higher probability of appendicitis. A low diagnostic score of zero to three indicates a low likelihood of appendicitis; other possible diagnoses should be investigated. A low score is more likely to "rule out" appendicitis than a higher score of greater than or equal to seven is to "rule in" the diagnosis (Martin & Kang, 2019, Table 1).

Due to children not always having a straightforward or typical presentation of appendicitis, there may be different clinical manifestations seen in different age groups.

Appendicitis scoring tools assist in the diagnosis of appendicitis; they should never be used alone. Their use must be in conjunction with a complete physical exam, past and current medical history, laboratory values, and diagnostic imaging.

There are many factors involved in the diagnosis of appendicitis. After triaging the patient, the clinician must decide what is the next step in identifying the source of the abdominal pain. There are laboratory tests that assist in the diagnosis. According to the Children's Hospital of Philadelphia's Appendicitis Clinical Pathway (2020), the following laboratory studies should be performed:

- For all patients
  - Complete blood count
  - Absolute neutrophil count
  - C-Reactive Protein
  - Basic metabolic panel
- As clinically indicated
  - Comprehensive metabolic panel
  - Lipase, amylase
  - Urine pregnancy test
  - Urine for gonorrhoea and chlamydia, Chyamydia ligase chain reaction
  - Vaginal swab for Trichomonas
- For ill patients
  - lood culture
  - Coagulation studies
  - Lactate
  - Blood type and screen (not indicated for routine appendectomy)

Due to children not always having a straightforward or typical presentation of appendicitis, there may be different clinical manifestations seen in different age groups. The following, as described by UpToDate, are lists of symptoms and their frequency depending on the age ranges.

Neonates (0 to 30 days):

- abdominal distension – 75%

- vomiting – 42%
- decreased oral intake – 40%
- abdominal tenderness – 38%
- sepsis – 38%
- temperature instability – 33%
- lethargy or irritability – 24%
- abdominal wall cellulitis – 24%
- respiratory distress – 15%
- abdominal mass – 12% (Wesson & Brandt, 2020, para. 22)

Young children (<5 years):

- abdominal pain – 72 to 94%
- fever – 62 to 90%
- vomiting – 80 to 83%
- anorexia – 42 to 74%
- rebound tenderness – 81%
- guarding – 62 to 72%
- diffuse tenderness – 56%
- localized tenderness – 38%
- abdominal distension – 35%
- diarrhea (frequent, low volume, with or without mucus) – 32 to 46% (Wesson & Brandt, 2020, para. 26)

School-age children (5-12 years):

- anorexia – 75%
- vomiting – 66%
- fever – 47%
- diarrhea – 16%
- nausea – 79%
- maximum abdominal tenderness in the right lower quadrant – 82%
- difficulty walking – 82%
- pain with percussion, hopping, or coughing – 79% (Wesson & Brandt, 2020, para. 28)

In adolescents, the clinical findings for appendicitis are similar to those in adults. These may include the classic features of:

- fever
- anorexia
- periumbilical pain that migrates to the right lower quadrant of the abdomen
- vomiting (Wesson & Brandt, 2020, para. 29)

For adolescent girls who are postmenarchal, it is very important to get a menstrual and sexual activity history to distinguish the pain of appendicitis from the pain of a gynecological disorder such as:

- Mittelschmerz (pelvic and lower abdominal pain that some women experience during ovulation)
- ovarian cysts
- ectopic pregnancy
- pelvic inflammatory disease (Wesson & Brandt, 2020, para. 30)

TREATMENT

Once appendicitis has been narrowed down by signs and symptoms and with laboratory findings, the next step is imaging. According to the American College of Radiology, it is "recommended that imaging in children with atypical or equivocal clinical findings for appendicitis begin with ultrasonography (US)" (Almaramhy, 2017, p. 4). Imaging is not recommended or necessary when there is little to no likelihood the patient has appendicitis based on clinical examination, laboratory studies, and Alvarado or PAS score.

Imaging by x-ray may provide clues (such as the presence of a calcified appendicolith in the RLQ), but x-rays are "neither sensitive nor specific" (RadTechOnDuty, 2018, para. 2) and therefore are not considered for diagnostic purposes. According to UpToDate, for "…patients whose initial ultrasound is equivocal for the diagnosis of appendicitis, repeat physical examination[s] and a second ultrasound in patients who have persistent findings of appendicitis has good diagnostic accuracy and can markedly reduce the number of children undergoing [computed tomography]" (Taylor et al., 2019, para. 6).

Children who have an atypical physical exam, history, or laboratory findings or who received antibiotics before evaluation should receive an US or computed tomography (CT) for diagnostic accuracy. If there is a high likelihood of appendicitis from the diagnostic criteria utilized, the patient should be evaluated by a pediatric surgeon (if available) prior to "urgent imaging studies" (Taylor et al., 2019, para. 2). If the clinician is in a setting where imaging is not available, the child should be transferred to a facility more suitable for emergent treatment. When the US is performed, the following findings are suggestive of appendicitis:

- Visualization of a blind ending, non peristaltic, noncompressible appendix
- A diameter of greater than 6mm
- Presence of an appendicolith, and distention of lumen
- Peri-appendiceal free fluid
- [Of note] a negative ultrasound does not exclude appendicitis; if there is a high degree of clinical suspicion, this should not preclude further imaging or laparoscopy (RadTechOnDuty, 2018, para. 5)

When the US is inconclusive or there is an atypical presentation of abdominal pain, a CT scan may be used. A CT with contrast is not first-line due to the increased exposure to radiation. However, it is "…recommend[ed] that children with suspected appendicitis and nondiagnostic findings on ultrasound who proceed directly to CT undergo contrast-enhanced CT with intravenous contrast rather than no contrast" (Taylor et al., 2019, para. 26). The following findings are present on CT scan in appendicitis:

- A thickened appendix plus an appendicolith
- Inflammatory stranding in the adjacent fat
- An inflammatory appendix mass
- A local collection [of fluid]
- Local lymphadenopathy (RadTechOnDuty, 2018, para. 7)

At times, pediatric patients may be treated in nonpediatric hospitals by nonpediatric clinicians. In these instances, an MRI is considered a very good alternative to CT due to the "lack of ionizing radiation and no need for IV contrast material or sedation [which] make rapid MRI both attractive and appropriate for imaging clinically suspected appendicitis in children. Pediatric appendix MRI can be interpreted by nonpediatric radiologists with high accuracy, and an imaging algorithm that includes rapid MRI can be both feasible and effective in a nonpediatric subspecialty setting, thus widening the efficacy of [the] pediatric appendix MRI using observers of a less specialized focus" (Covelli et al., 2019).

After the diagnosis of appendicitis is made, there are two options for treatment: surgery and non-surgical management. The treatment of choice is the surgical removal of the appendix, or appendectomy. There are two types of surgeries to remove the appendix: open or laparoscopic. The open method requires a surgical incision to be made in the right lower quadrant of the abdomen. The laparoscopic method utilizes two to three small incisions, and a laparoscope camera is introduced to guide the surgeon in appendix removal. There has not been good evidence that [laparoscopic appendectomy] has shown a decrease in "postoperative pain and [an] earlier return to normal activities …however, the decrease in hospital length of stay provides indirect evidence for [the] benefits" (Wesson & Brandt, 2020, para. 20).

Although removal of the appendix is the gold standard, non-surgical management or "nonoperative treatment of early appendicitis has been proposed and may be an option in selected children with early, uncomplicated appendicitis depending upon caregiver preference. Specifically, it may be safe and effective for older children who can better describe their symptoms (over six years of age) and have features of early appendicitis" (Wesson & Brandt, 2020, p. 30). In nonoperative treatment, the patient must meet certain criteria:

- Abdominal pain for <48 hours
- White blood cell (WBC) count of [less than] 18,000/microL
- Normal C-reactive protein
- No appendicolith (a calcified deposit within the appendix) present on imaging
- Appendix diameter [less than] 1.1cm on imaging
- No preoperative concern for rupture based on clinical findings (Wesson & Brandt, 2020, para. 30)

Nonoperative treatment consists of:

- Admitting the patient to the hospital for observation;
- Administering IV antbiotics for a minimum of 24 hours;
- Making the patient NPO for at least 12 hours and advancing the diet if the pain/tenderness decreases;
- When the patient is tolerating a regular diet (no nausea/vomiting), switching to oral antibiotics in the hospital setting to determine tolerance; and
- Discharging the patient and instructing the patient to complete a 10-day total course of oral antibiotics (Minneci et al., 2015, p. 409)

If the nonsurgical option is chosen, the patient needs to be followed closely for improvement in abdominal pain, fever, appetite, and intestinal function. If the patient shows any signs of worsening condition (i.e., increased pain and/or sepsis) or if there is a failure to show improvement (i.e., no decreased fever, decreased pain/tenderness, or resolved nausea/vomiting) within 24 hours, the patient is considered to have failed the nonoperative option and prompt appendectomy may be warranted (Minneci, et al., 2015, p. 409).

According to an article published in the Journal of the American Medical Association Surgery, "appendicitis is a common surgical condition, with a cumulative lifetime incidence of 9%. Children experience the greatest risk of disease, and incidence among children is four times greater than the overall population…children particularly those younger than fifteen years, are at a very high risk of perforated appendicitis compared to young adults" (Willis et al., 2016, para 1). Pediatric emergency departments have reported that admission for acute appendicitis "accounts for 11.4%" of admissions, and "more than 70,000" children are hospitalized annually in the United States (Minneci et al., 2015, p. 409).

Although appendicitis is considered a surgical emergency that requires prompt treatment to prevent perforation and other complications, there is "…evidence from observational studies [that] suggests that adverse outcomes (e.g., perforation, complications, or operating time) are not increased for children who receive timely administration of antibiotics and undergo appendectomy less than 24 hours after diagnosis" (Wesson & Brandt, 2020, p. 17). Therefore, failure or delay "in diagnosing appendicitis [are] the most common causes of [pediatric] malpractice lawsuits and account for the majority of the largest payment to plaintiffs outcomes" (Sullins et al., 2016, para. 1).

Prompt evaluation, diagnosis, and treatment are vital to avoid medical malpractice. The mortality rate of appendicitis is "less than 0.1 percent," and "most deaths occur in very young children and in those with complicated perforating appendicitis who undergo surgery before they are adequately resuscitated or who develop uncontrolled postoperative sepsis" (Wesson & Brandt, 2020, para. 83). Children are less likely to experience morbidity than adults.

Complications arising from an appendectomy may be seen early or late in the post-operative period. Early complications consist of wound infection and paralytic ilieus (an intestinal blockage in the absence of an actual obstruction). Late complications may include a small bowel obstruction due to adhesions or stump appendicitis, which is an "inflammation of residual appendiceal tissue months to years after an appendectomy" (Wesson & Brandt, 2020, para. 81). Not only is the initial diagnosis and treatment important, but so is the post-operative care.

After surgery, the criteria for discharge is based on the clinical appearance of the patient. The patient should be afebrile, tolerating a regular diet, and pain-free (or have the pain controlled with non-narcotic analgesics). The length of stay depends on the type of surgery and may be longer for more complicated or advanced cases. The child should be followed closely for any changes in status from beginning to end to note any complications as soon as possible.

THE LNC'S ROLE IN MALPRACTICE LITIGATION

The role of the LNC is to first request and obtain all the medical records. A list needs to be made of all the sources of medical records. Due to the sometimes difficult or atypical presentation of appendicitis in children, there may be multiple visits to the primary care provider(s), specialist(s), urgent care facilities, and/or emergency department(s). The LNC should request all medical records from all providers regarding the presenting symptoms. Do not hesitate to inquire about any additional medical records if available. These records may give a more extensive picture of the child's condition and presentation.

In reviewing the medical records, there are several key areas of documentation to identify and analyze:

- subjective and objective history
- parent/guardian description of signs/symptoms
- complete past medical and surgical history
- full medical examination
- differential diagnoses for the presenting illness

A differential diagnosis is one of the most important findings in the chart. This identifies if the provider had a broad focus on the whole presentation or a more singular focus which could lead to an error in diagnosis, especially if the presentation was atypical. There can be several alternative diagnoses, depending on the child's age, that should be included in the differential diagnosis list. Some very common diagnoses that should be considered and ruled out when a child presents with abdominal pain or tenderness are:

- streptococcal pharyngitis (which may present with abdominal pain, fever, nausea, vomiting, loss of appetite)
- lower lobe pneumonia (which may present with abdominal pain, fever, loss of appetite, nausea, vomiting)
- pelvic inflammatory disease
- pregnancy
- menstrual cramping
- urinary tract infection
- constipation
- gastroenteritis

The legal nurse consultant's analysis should focus on the presenting signs and symptoms, history and physical, diagnostic testing, differential diagnosis, treatment, response to treatment, and follow-up.

This is not an exhaustive list, but it provides more insight into how the clinician arrived at the final diagnosis and plan of care.

Pitfalls when making a diagnosis include:

- not focusing on the "big" picture;
- minimizing symptoms due to an "atypical" presentation;
- disregarding a parent's concern or point of view;
- not getting a thorough history of the current illness and previous medical history;
- ordering inappropriate laboratory testing or imaging;
- relying solely on labs and imaging and not "looking" to the patient for a complete picture;
- stopping the search for additional diagnoses once "THE" diagnosis has been made, even if the diagnosis doesn't fit or there are other questions or concerns;
- failing to discuss with the parent/guardian the specific criteria for follow-up with worsening or persistent symptoms; and
- failing to document instructions regarding follow up (i.e., how and when to follow-up).

Documentation should reflect any treatment rendered for the presumed diagnosis as well as responses to that treatment. The patient should be followed closely if there is any suspicion of appendicitis. Children do not always have the typical presentation of appendicitis, so follow-up is key if symptoms persist or progress. The parent or guardian may not realize the seriousness or the urgency of the situation, which can lead to tragedy, so the parent or guardian should be given specific instructions on when and how to follow up if the child's condition changes.

In reviewing the chart, search for ALL the information that would give the most accurate presentation. Is there documentation of:

- Review of diagnostic testing (i.e., labs, imaging, etc.);
- Timing of communication with team members regarding results of diagnostic testing and the patient's condition; and
- Consultation with a specialist?

A comprehensive chart review is extremely important. Due to the often atypical presentation of illnesses in children, it is crucial to put together a complete picture for the attorney-client.

SUMMARY

Pediatrics can be a difficult specialty. Not every case will have a "typical" presentation, and thus children are subject to misdiagnosis. A delay or failure to diagnose appendicitis can have tragic consequences for a child, so close follow-up is important if there is any suspicion of appendicitis. The legal nurse consultant's analysis should focus on the presenting signs and symptoms, history and physical, diagnostic testing, differential diagnosis, treatment, response to treatment, and follow-up with the ultimate goal of providing the attorney with an objective evaluation of all aspects of the case.

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FEATURE

Root Cause Analysis: A Pediatric Case Study

Katherine Haney, MSN, RN-BC

Keywords: Root cause analysis, system breakdown, process error, pediatrics, risk management

A root cause analysis (RCA) is a retrospective, structured investigation of an adverse event, near miss, or sentinel event. By using RCAs to evaluate the events, hazards, and vulnerabilities in their systems of care, organizations and individuals can gain an understanding of what happened and why and then identify actions to prevent a recurrence. A root cause analysis helps healthcare organizations to better understand what circumstances led to an undesirable outcome or near miss, what safety rules were violated, and where individual providers and the organization as a whole failed. Adverse events in healthcare come from a mix of active failures, latent conditions, and contributory factors.

WHAT IS A ROOT CAUSE ANALYSIS?

The Joint Commission (2015) defines root cause analysis (RCA) as "a process for identifying the basic or causal factor(s) underlying variation in performance. Variation in performance can (and often does) produce unexpected and undesired adverse outcomes" (p. 1). Ultimately, RCAs are used to determine why an unexpected or unintended outcome occurred and "to identify system vulnerabilities so that they can be eliminated or mitigated" (National Patient Safety Foundation, 2015, para. 4). By using RCAs to evaluate the events, hazards, and vulnerabilities in their systems of care, organizations and individuals can gain an understanding of what happened and why and then identify actions to prevent a recurrence. A root cause analysis helps healthcare organizations to better understand what circumstances led to the undesirable outcome or near miss, what safety rules were violated, and where individual providers and

the organization as a whole failed. It is important to note RCAs generally focus on organization-level system and process failures, not on individual-level performance failures "since individual performance is a symptom of larger systems-based issues" (National Patient Safety Foundation, 2015, para. 4).

Mapping out events in a chronological manner is one way to review the care provided. However, in RCA methodology, events are grouped together based on categories. This allows different insight into what exactly occurred and why. One main advantage to grouping events into categories is it clearly demonstrates what failures occurred at the system and organizational level that contributed to the adverse outcome, near miss, or harm to a patient. Adverse events in health care almost never occur because of one, singular cause. They are typically a combination of active failures and latent conditions that align and slip through any safety mechanisms in place (The Joint Commission, 2015). Active failures are "errors occurring at the point of interface between humans and a complex system" such as an electronic health record software program or an automated medication dispensing system (Agency for Healthcare Research and Quality, 2019, para. 1). Latent conditions are "the hidden problems within health care systems that contribute to adverse events," e.g., no defined standard workflow (Agency for Healthcare Research and Quality, 2019, para. 1). This systems approach "is one of the most widely used retrospective methods for detecting safety hazards" in healthcare organizations across the country (Agency for Healthcare Research and Quality, 2019, para. 1).

A root cause analysis helps healthcare organizations to better understand what circumstances led to the undesirable outcome or near miss…

HOW IS AN RCA PERFORMED?

In a high reliability, patient safety-focused organization, RCAs are performed by a team made up of various members of leadership, including representatives from Quality, Risk Management, Nursing, and ancillary departments as well as ad hoc members based on the type of event and where it occurred. Additionally, members of the care team with personal knowledge of the processes and systems involved in the event under investigation should also participate. Root cause analyses performed by the facility are typically peer review protected (and thus non-discoverable) during litigation.

There are four steps to performing a root cause analysis.

1. Identify what happened to the patient.
2. Determine what should have happened.
3. Determine the causes. Causes are categorized into six different groups, which will be discussed further below: communication, training, fatigue/scheduling, environment/equipment, rules/policies/procedures and barriers. The RCA team methodically reviews each category to determine the root causes and contributing factors. Root causes are "the underlying process and system issues" identified by analyzing the contributing factors, "the situations, circumstances or conditions that increased the likelihood of the event" (Centers for Medicare and Medicaid Services, n.d.).
4. Develop causal statements. These statements explain how the contributory factors brought about the adverse outcome.

To better understand these steps, consider the following fictitious case scenario.

WHAT HAPPENED?

Liam is an eight-year-old, right-hand dominant male who is brought into the county emergency department after collapsing on the baseball field. It is a hot day in the middle of summer, and his parents report he did not break much for water during the soccer game. Liam is difficult to arouse, has dry mucous membranes, and a general ill appearance. His lab results show severe dehydration, and the registered nurse (RN) starts an intravenous (IV) infusion of five percent dextrose and 25 percent normal saline, plus 20 mEq per liter of potassium in his right hand. Liam's mental status starts to improve over the next few hours, and he is conversing with his parents. He tells his nurse his hand hurts where the IV is running. The nurse explains the medicine they are giving may have a slight burn feeling. When the medication is complete, the RN switches him over to normal saline per orders. The RN sees his right hand is blistered, tense, and discolored. He has a decreased radial pulse, and capillary refill is greater than three seconds. Unfortunately, the infiltrate site progresses and results in necrosis to the tissue and major loss of function. Liam is no longer able to use his right hand for writing, throwing a ball, and activities of daily living.

WHAT SHOULD HAVE HAPPENED?

A thorough review of the medical records revealed the RN did not correctly place a large bore IV in a large vein above the wrist as directed in the

organization's policy for the administration of caustic medication. Additionally, the IV site, skin, and tolerance were not assessed every two hours as required. Lastly, when the RN notified the emergency department physician of the infiltrate, a vascular or plastic surgery consult was not placed as outlined in the organization's policy.

WHAT WERE THE CAUSES, AND HOW DID THEY CONTRIBUTE TO THE OUTCOME (CAUSAL STATEMENTS)?

Communication: This category asks questions like "Was communication between staff adequate?" and "Was a 'readback' or confirmation message utilized?" (National Patient Safety Foundation, 2015, p. 31-32). In the case scenario, the RN documented Liam's complaints of pain at the IV site and the education provided to him and his family regarding the side effects of a potassium IV infusion. Unfortunately, Liam's complaint of pain to the RN did not prompt the RN to perform an assessment of the IV site. If an assessment had been performed, the RN may have been able to identify the infiltrate sooner and intervene, thereby reducing the risk of tissue necrosis and loss of function. *This is a failure of the RN to assess the site of pain that was communicated by the patient.*

Training: This category asks, "Was the staff training adequate?," "Were the results of training monitored over time?," and "Did the organization provide adequate training programs for staff with the intent of them performing their tasks without errors?" (National Patient Safety Foundation, 2015, p. 32). In the case mentioned, the RCA team requested education documentation from the organization regarding IV infiltrations, including the actual education module/content, number of learners who have taken the module and when, competency testing scores, etc. In reviewing this information, the RCA team noted up-to-date, good quality content but noticed a high number of learners took the module in the recent past. This may suggest the organization was having an increase in IV infiltrations and was attempting to reactively (rather than proactively) educate staff regarding prevention, recognition, and treatment. *This is a failure of the organization to enforce its education/training requirements and ensure its RNs met competency before an adverse event occurred.* The content and quality of the educational materials was good, but the education and competency testing were not executed the way the organization intended.

Fatigue/scheduling: For this category, the RCA team considers questions such as "Did scheduling allow personnel to have adequate sleep?," "Was fatigue properly anticipated?," and "Were there sufficient staff on hand for the patient workload at the time?" (National Patient Safety Foundation, 2015, p. 32). Looking at the emergency department census for the shift in question, the RCA team discovered it was a very busy Saturday afternoon. This particular nurse had three other patients (including a myocardial infarction patient) while caring for Liam. *The RN was working a 12-hour shift (the second one in a row) with a higher than average and complex patient load, increasing the chances an error would be made or a policy and procedure not followed.*

Equipment/Environment: This category asks the RCA team to focus on questions such as "Was there a documented safety review performed on the equipment provided?" and "Was there adequate equipment to perform the work process?" (National Patient Safety Foundation, 2015, p. 33). In this fictional scenario, the RCA team asked for the preventative maintenance log as well as the audit trail for the IV pump that was used to infuse the medication. A review of these documents revealed the organization followed its own requirements for scheduled quality checks and the pump performed as programmed to deliver the drug at the appropriate rate. No deviations from standards within the equipment category were found.

Questions to consider in this case from the environmental perspective include where were the room locations of the RN's other assigned patients and was the RN having to traverse the entire department to see all of these patients or were they placed in adjacent rooms from each other. A copy of the emergency department's floor plan was requested and showed all assigned patients were within close proximity of each other except for the myocardial infarction patient who was placed in the trauma bay across the department from Liam. *Because the nurse had to care for patients in two separate areas of the department, this took away from time the RN could*

have been assessing and intervening with the infiltrated IV.

Rules/Policies/Procedures: This category focuses on questions such as "Were there written policies and procedures that addressed the work processes related to the adverse event?," "Were these policies and procedures consistent with state and national guidelines?," and "Were the relevant policies actually used on a day-to-day basis?" (National Patient Safety Foundation, 2015, p. 34). Upon reviewing the organization's policy and procedure for IV infiltrations, the RCA team learned the provider is responsible for consulting wound care, vascular, and plastic surgery specialties when an IV infiltration has occurred and caused damage. In comparison, Liam's medical records showed only wound care was consulted after identification of the injury. The wound care RN assessed Liam and, at that time, spoke with the emergency department physician about the need for additional consults. This resulted in a five-hour delay of specialty care. The Medical Staff Rules, Regulations, and Bylaws for this organization state independently-contracted providers (such as the emergency department physician) are required to follow the policies and procedures outlined by the hospital. *This is a failure of the organization to ensure its policies are followed by all members of the care team.* Because of this breakdown on a system level, care was delayed resulting in loss of function to Liam's hand.

Barriers: Lastly, it is important to assess what barriers and controls were involved in an adverse event. Questions to consider include, "Were these barriers designed to protect patients, staff, equipment, or the environment?" and "Had these barriers been evaluated for reliability?" (National Patient Safety Foundation, 2015, p. 34). In this case scenario, when the RN scanned the IV solution to hang it, the organization's barcode medication administration software program generated a pop-up alert in the electronic medical record advising this was a caustic medication. The alert reminded the RN of the potential for serious tissue injury with the medication. Unfortunately, the RN dismissed this reminder and did not use it as a tool to help with the assessment process. While there is value in this built-in safety barrier, it is only as good as the human interacting with it. *This is a failure of the RN to heed the alert, initiate interventions to reduce the risk posed by administering a caustic medication, and provide additional assessment in light of this risk.*

SUMMARY

In this case study, Liam suffered an IV extravasation of potassium which led to necrosis and loss of function of his dominant right hand. A thorough root cause analysis identified several areas of opportunity for the organization. Clearly defining action items to improve the system or processes and identifying which stakeholder is responsible for each action is the best way to minimize the chance of this type of harm happening again. First, nursing at this facility needs reeducation around communication and reassessment when a patient verbalizes pain and discomfort. Reeducation should also include steps to take to prevent an IV extravasation as well as appropriate interventions once one is recognized - as already outlined in the facility's existing policy. Nursing should also be reminded the electronic alerts and barriers are there to prevent patient harm and should not be quickly dismissed. Second, the facility should focus on enforcing compliance with education. By ensuring all required staff complete assigned learnings, administration can further sort out whether this is truly a lack of education issue or a behavioral compliance issue. Next, the facility should look at nurse-to-patient ratios, how to better balance patient acuity in each nurse's assignment, and ways to ensure each nurse's patients are in close proximity. This would have prevented the RN from having several high acuity patients at the same time during the shift in different areas of the department. Once the action items have been completed, the RCA team should schedule random audits on the process throughout the year to ensure action items have been addressed and overall compliance has increased. By periodically evaluating and analyzing the effectiveness of the RCA action items, the facility can ensure the RCA was productive and meaningful and can also continue to reduce the risk of patient harm.

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Three Costly Components of a Pediatric Life Care Plan

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Keywords: special damages, expert testimony, pediatric life care plan, pediatric home care, residential care, special education services, therapeutic modalities

The legal nurse consultant (LNC) working for either the plaintiff or defense on a case involving injuries to a minor may encounter a pediatric life care plan. Regardless of whether the special damages result from personal injury, product liability, or medical malpractice, injuries sustained from birth through the age of 21 can result in high dollar special damages. A pediatric life care plan may be required to support the need for future medical care and its associated costs. Pediatric life care plans are unique; they include many of the same goods and services as in adult plans, but children require extra support care, services, and therapeutic modalities. These additional services enable children to achieve the highest level of function during their years of growth and development. Some services may need to continue over their lifetime.

For cases in which the opposing party has produced a pediatric life care plan, it is prudent for the LNC who does not have pediatric life care planning experience to recommend the attorney-client retain a pediatric nurse life care planner to specifically evaluate the high-cost areas of the plan. Nevertheless, it is valuable for the LNC to understand some of the underlying principles of life care planning, including that the plan's recommendations need foundation, must be related to the injury and supported by the case facts, and must be within the planner's scope of practice. With this understanding, the LNC is better positioned to collaborate on the case with the attorney by understanding what areas of the life care plan can be challenged and why.

The legal nurse consultant (LNC) working for either the plaintiff or defense on a case involving injuries to a minor may encounter a pediatric life care plan. Regardless of whether the special damages result from personal injury, product liability, or medical malpractice, injuries sustained from birth through the age of 21 can result in high dollar special damages. A pediatric life care plan may be required to support the need for future medical care and its associated costs.

Special damages are quantifiable economic losses incurred by the plaintiff as a result of an injury (Lorenz, 2020). Their specific monetary values are supported by evidence. Special damages may include past and future medical expenses, special equipment (e.g., wheelchairs), home and vehicle modifications, past and future wage loss, loss of earning capacity, and out-of-pocket expenses (Albee et al., 2020). To provide evidence of future medical needs, a life care plan (LCP) may be needed. Nurse life care planning is the development of lifetime plans of care and associated costs for the "protection, promotion, and optimization of health and abilities for individuals and families affected by catastrophic injuries, and chronic and complex health conditions" (Czarnik et al., 2015, p. 6). Life care planning is transdisciplinary; thus, LCPs may be written by planners from any number of disciplines, e.g., nursing, rehabilitation, psychology, physical or occupational therapy, medicine, etc.

It is important to remember the adage that a child is not a mini adult. For cases in which the opposing party has produced a pediatric life care plan, it is prudent for the LNC who does not have pediatric life care planning experience to recommend the attorney-client retain a pediatric nurse life care planner to specifically evaluate the high-cost areas of the pediatric life care plan. The LNC should have a general understanding of three costly components of a pediatric life care plan to better comprehend this expert's evaluation and what components of the plan can be challenged and why. [A discussion of every aspect to consider when evaluating or critiquing a pediatric life care plan (including the planner's qualifications, methodology, overall plan quality, and projected life expectancy) is beyond the scope of this article.]

Depending on the diagnosis and the extent of necessary treatment, the costs of goods and services required over the lifetime can be extremely high. This article will focus on three costly services typically found in a pediatric LCP. These are:

1. Support care;
2. Therapeutic modalities; and
3. Home and residential care age 22 to life expectancy (LE).

The pediatric life care plan recommendations need to be related to the injury and supported by the facts of the case. The life care planner should include rationales to substantiate the recommended goods and services. The plan recommendations also need to be within the planner's expertise. For example, home and nursing care recommendations are within a registered nurse's scope of practice. Plan recommendations beyond the planner's area of expertise should be supported by medical experts, treating providers, treatment guidelines, medical records, the child's history of utilization, and billing records.

The International Association of Rehabilitation Professionals and Academy of Life Care Planners is a good resource for cost best practices. Planners from a variety of disciplines have developed consensus and majority statements regarding the practice of life care planning. In terms of identifying costs in a life care plan, best practices include:

a. Using verifiable data from appropriately referenced sources;
b. Identifying costs that are geographically specific when appropriate and available;
c. Using non-discounted/market rate prices; and
d. Offering more than one cost estimate, when appropriate (Johnson et al., 2018).

With regard to verifiable data from appropriately referenced sources, the date the costs were obtained and other contact information (i.e., person, address, phone number) should be included in the plan. Merely referring to a proprietary company database or listing the names of several providers without any other data (i.e., who, what, when, and how much) is not sufficient as the data cannot be verified. According to Research and Planning Consultants, L.P. (2018), the usual, customary, and reasonable charge for healthcare services is the 75th-80th percentile, i.e., 75-80% of providers in the geographical area charge the same or less.

SUPPORT CARE

Support care is care provided to a child at home to meet the child's medical needs and activities of daily living. Support care may consist of skilled care such as tracheostomy care, gastrostomy

Depending on the diagnosis and the extent of necessary treatment, the costs of goods and services required over the lifetime can be extremely high.

feedings, and medication administration that is provided by licensed healthcare providers, or it may consist of non-skilled care such as bathing that is provided by aides and other unlicensed personnel.

Home care can be one of the costliest components of a pediatric life care plan, especially if skilled care is required. Evaluation of the LCP should include looking carefully at the type of care necessary (skilled or non-skilled), the extent of care needed, the cost, and the cost resources. If non-skilled care by a home health aide is recommended in a plan that includes medication administration, the current medication administration rules in the state in which the child will receive care should be verified. A starting point may be the American Nurse's Association's "Medication Aide / Technician Categories By State" chart (2015).

Evaluation of the LCP should also include whether the resources used by the planner are specific to the pediatric community. For example, the use of the Genworth Cost of Care Survey (2020), while valid for the cost of care in the adult community, is not valid for identifying the cost of care for children, because the cost data is derived from nursing homes, assisted living facilities, adult day health facilities, and home care providers.

ACCESSIBLE ENVIRONMENT
FOR PEOPLE WITH DISABILITIES

Pediatric life care plans need to identify care costs provided by specific providers within the child's geographical area who are available to render the recommended care. Only agencies capable of providing pediatric home health care are to be considered as resources in a pediatric life care plan. Although some agencies note they offer pediatric aides and nursing care on their website, this may not be the case when contacting them to verify availability. The agency may only be able to provide pediatric home health aide or nursing visits rather than hourly care or may not be able to provide pediatric home care at all.

Pediatric life care plans may also include costs associated with care during school hours. Every child who is eligible for and receives special education services under the Individuals with Disabilities Education Act (IDEA) must have an individualized education program (IEP) (Center for Parent Information and Resources [CPIR], 2017a). The child's pre-school evaluations and IEPs should be reviewed to learn if aide or nursing care is recommended during school hours.

From age 3-5 years (if the child attends preschool) and age 5-21 years (if a child attends school), aide or skilled care deemed necessary in an IEP is provided during school hours for the calendar school year. Often, the IEP will recommend an extended school year (ESY) for an additional number of weeks, such as 4, so care during the ESY should also be factored into the LCP.

Recommended care during school hours should be included at the school district's expense, but this should be verified. If required services cannot be provided by the school district, these

hours should be incorporated into the LCP along with supportive documentation to justify their inclusion. The planner will need to specify the type of care or service and how many hours of care or the frequency of a service that the school district cannot provide.

Hours of aide or nursing care provided by the school should be considered when evaluating a pediatric life care plan. This is an area that can be challenged if the planner recommends an excessive number of hours of home aide or nursing care.

THERAPEUTIC MODALITIES

Early Intervention is a program of supports and services for babies and children with developmental delays and disabilities. From birth until the age of 3, the Early Intervention Program (EIP) is available in all states and territories (Centers for Disease Control and Prevention, 2019). Early Intervention services are provided by Part C of IDEA (CPIR, 2017b).

Early Intervention begins with an evaluation to determine the extent of developmental delay(s) and the specific services needed to address the delay(s). Such services can then be provided in the home environment free-of-charge or at reduced cost to the family. Services in New York State, for example, can include:

- Family education and counseling, home visits, and parent support groups;
- Special instruction;
- Speech pathology and audiology;
- Occupational therapy;
- Physical therapy;
- Psychological services;
- Service coordination;
- Nursing services;
- Nutrition services;
- Social work services;
- Vision services; and
- Assistive technology devices and services (New York State Department of Health, 2019).

When the child ages out of EIP, services may be continued through the child's IEP. The child's annual EIPs, IEPs, and documentation by the various service providers should be reviewed to learn the extent of the child's delays, the services recommended, the goals achieved, and the areas in which services are still needed. This could be an area challenged if the planner did not consider these records during plan development.

A pediatric life care plan may include both educational therapies and medical therapies. Educational therapies are those recommended in the child's IEP and provided at school. These may include physical therapy (PT), occupational therapy (OT), and speech therapy (ST). Medical therapies, such as aquatic therapy, are provided in the community or home and target the child's medical diagnosis, such a cerebral palsy. Medical therapies to improve the child's function are valuable but can be costly during the child's years of growth and development. For example, a child with cerebral palsy may require extensive school-based and medical-based PT, OT, and ST during growth and development.

All the therapeutic modalities recommended in a pediatric life care plan should be reviewed to ensure there is sufficient foundation for each recommendation and to verify that costs and services are not duplicated. The recommendations contained in the child's IEP provide the foundation for educational therapies, and recommendations and prescriptions by the child's treating provider(s) provide the foundation for medical therapies provided at home or in the community.

The pediatric life care planner may also rely on the state's physical therapy practice act for the provisions and limitations of direct access to physical therapy services (without a prescription or referral from a provider) (American Physical Therapy Association, 2020). Based on this, the planner may recommend annual PT evaluations and PT sessions to evaluate the child's needs and prevent deterioration of function.

HOME AND RESIDENTIAL CARE AGE 22 TO LIFE EXPECTANCY

Parents often report during the life care planning process that they want their child to live with them when their child becomes an adult. The circumstances for each child and family differ, so options once the child turns 22 years old can vary. Based on factors such as the individual's needs and capabilities, the family's needs, and projected life expectancy, at least two options should be included in a pediatric LCP for the

timeframe when the individual is age 22-LE.

Option 1 may be for the individual to live at home with family and support care. Private-hire versus agency-hire home care is controversial in the life care planning field. During the 2018 Life Care Planning Summit, there was no consensus to maintain, delete, or revise a previously developed statement that both private-hire and agency-hire are options to consider (Johnson et al., 2018). A tool is available that describes the many aspects that need to be considered if hiring staff privately (Preston, 2009). This tool may be useful when evaluating the proposed care in a pediatric life care plan.

If the individual is able to participate in a day program, the LCP should identify a specific program in the individual's geographic area that is available and capable of providing for the individual's needs. For example, if tube feedings are required, the day program needs to have nursing staff available. The planner should factor in the day program (typically six hours per day, 250 days a year) when developing care recommendations for the other 18 hours per day of those 250 days and the 24 hours per day of the remaining 115 days a year. The length of Option 1 varies depending on the family's choice, age of the parents, and other circumstances. At some point, the individual will typically transition to residential care, option 2, once the parents advance in years to age 60, for example.

Option 2, residential care, should be included in the LCP as an alternative regardless of the parents' expressed wish to care for their child into adulthood. The family structure may change, parents may not be able to care for their child as an adult, or parents may become ill or too old to continue this responsibility. Annual costs for residential care vary depending on the needs of the individual. If skilled care or one-to-one care is required for medical or behavioral issues, costs can be very high. The level and availability of required care in the facilities listed in the plan should be verified to identify if the plan is under- or over-funded.

These children will need care, medications, equipment, accommodations, and treatment to promote and support their growth and development, their transition into adulthood, and their needs over a lifetime.

SUMMARY

Children in need of a life care plan often have complex medical conditions and significant deficits in activities of daily living and require interdisciplinary care and a multitude of therapies, goods, and services. These children will need care, medications, equipment, accommodations, and treatment to promote and support their growth and development, their transition into adulthood, and their needs over a lifetime. Given the extent of these needs, pediatric life care plans can project high costs, thereby significantly increasing overall special damages. Legal nurse consultants working on cases involving pediatric life care plans should recommend the attorney-client retain a pediatric nurse life care planner to specifically evaluate the high-cost areas of the pediatric life care plan. With a general understanding of these LCP components, the LNC can appreciate the expert's analysis of the strengths and deficiencies in the planner's recommendations regarding support care, therapeutic modalities, and home or residential care. Thus, the LNC is better positioned to collaborate on the case with the attorney by understanding what areas of the LCP can be challenged and why.

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Childhood Cancer Malpractice Cases

An LNC's Guide to Understanding the Issues

Susan V Haibeck RN MS CLNC

Keywords: childhood cancer, pediatric oncology, failure to diagnose, misdiagnosis, delay in diagnosis, cancer malpractice

Cancer is rare in the pediatric population but is the number one cause of disease-related deaths in the United States of children aged 5-18 years (Carberry et al., 2018). Diagnosing cancer early in its course leads to improved prognosis; however, the challenge is identifying cancer when it is rare compared with other childhood illness. Although cancer is low on the differential diagnosis list, an astute health care provider will follow through with thorough physical examination and correlation of common signs and symptoms of childhood illness. Active listening to and documentation of the parent's concerns and descriptions are essential. Failure to diagnose, misdiagnosis, delay in diagnosis, and treatment-related errors are the most common violations of the standards of care in these cases. This article provides an overview of childhood cancers, discusses factors related to litigation of pediatric cancer cases, and uses case studies to provide insight into these types of cases.

CHILDHOOD CANCERS

According to the Rare Diseases Act (2002), a rare disease is defined as a disease affecting less than 200,000 people in the United States, so by definition, childhood cancers are rare. "In the United States in 2020, an estimated 11,050 new cases of cancer will be diagnosed among children from birth to 14 years, and about 1,190 children are expected to die from the disease" (National Cancer Institute, 2020, para. 2). An additional 5,800 adolescents (aged 15 to 19 years) will be diagnosed with 540 dying from cancer according to Siegel et al. (2020). "The causes of most childhood cancers are not known. About 5 percent of all cancers in children are

caused by an inherited [gene] mutation," according to the National Cancer Institute (2020, para. 17).

Berkow (2019) identifies the most common and less common types of childhood cancer as:

- Most common childhood cancers:
  - leukemias
  - brain cancers
  - central nervous system cancers
  - lymphomas
- Less common childhood cancers:
  - osteosarcoma (bone)
  - Wilms tumor (kidney)
  - retinoblastoma (eye)

Initial Signs and Symptoms

According to Berkow (2019), childhood cancer signs and symptoms are nonspecific, and initial identification is often difficult. Pediatricians, family practice physicians, nurse practitioners, physician assistants, and even obstetricians (since babies can be born with cancer) may be the first to recognize a sign or symptom indicative of childhood cancer.

Signs and symptoms include fever, musculoskeletal symptoms, pain, fatigue, pallor, bruising, headaches, bleeding, gastrointestinal complaints, and weight loss. These findings are common to a variety of childhood disorders but, if persistent, need to be followed. The diagnosis of childhood cancer may be a challenge because of the rarity of pediatric cancer compared with the prevalence of other childhood illnesses. Early identification of pediatric malignancy improves prognosis, whereas delays have a negative impact on prognosis as well as psychological well-being.

A newly diagnosed child will be referred to a pediatric cancer center or hospital where a multidisciplinary childhood cancer team will stage, grade, and treat the child. Hospitals with pediatric oncology teams are usually members of the Children's Oncology Group (COG). The COG, "a National Cancer Institute supported clinical trials group, is the world's largest organization devoted exclusively to childhood and adolescent cancer research" (Children's Oncology Group, n.d., para. 1). Clinical trials are standard treatment practice, with no placebos administered.

The diagnosis of childhood cancer may be a challenge because of the rarity of pediatric cancer compared with the prevalence of other childhood illnesses.

CHEMOTHERAPY MEDICATION ERRORS

Errors in the delivery of childhood chemotherapeutic regimens can lead to serious adverse events and, in certain cases, death. Multiple specialists are involved in ordering and administering chemotherapy agents and monitoring the patient. According to Walsh et al. (2009), up to 19% of pediatric cancer outpatient visits involve errors in chemotherapy delivery. Medication errors are the most common, yet the most preventable, way pediatric patients can be harmed during treatment. "When medication errors occur, pediatric patients have a much higher risk of death than do adults" (Hughes & Edgerton, 2005, p. 79). Studies in pediatric settings found 4.5 – 5.7 errors per 100 medication orders, and "the prescribing or ordering phase is associated with the most errors - usually dosing errors - followed by the administering phase" (Hughes & Edgerton, 2005, p. 79).

"Children and adolescents are at greater risk than adults for medication errors because they have immature physiology as well as developmental limitations that affect their ability to communicate and self-administer medications" (Hughes & Edgerton, 2005, pp. 79-80). In addition, most medications are developed in concentrations for adults (with safe pediatric dosages being a fraction thereof) (Hughes & Edgerton, 2005, p. 80). Administration of an "adult dose to a child without considering the child's weight, age, and clinical condition can cause an overdose and may result in toxicity and death" (Hughes & Edgerton, 2005, p. 80). Furthermore, "pediatric indications and dosage guidelines often [are not] included with a medication" (Hughes & Edgerton, 2005, p. 80). This necessitates calculating weight-based dosages or diluting the medication, which increase the risk of medication error (Hughes & Edgerton, 2005, p. 80). "Misplacement of the decimal point is a common dosing error that can lead to a tenfold" overdose or underdose (Hughes & Edgerton, 2005, p. 82). "If no calculation [or dilution] is required, the risk of an error decreases significantly" (Hughes & Edgerton, 2005, p. 80).

According to Hughes & Edgerton (2005, p. 80), some variables common to pediatric medication errors include:

- patient age younger than two years
- medication administration in intensive care units (ICUs), especially neonatal ICUs
- medication administration in emergency departments between the hours of 4 AM and 8 AM or on weekends (especially if the child is seriously ill)
- administration of chemotherapy

- administration of intravenous (IV) medication
- no documentation of the child's weight

Children undergoing cancer treatment also typically have central lines for chemotherapy, supportive fluids, antibiotics, and blood products. This route provides another potential source of complications and errors, such as catheter-related blood stream infections, insertion site infection, occlusion, dislodgement, thrombosis, and leakage (Beck et al., 2019).

CHILDHOOD CANCER LITIGATION

Statute of Limitations

"The statute of limitations is the time period within which a prospective plaintiff may bring a cause of action following the event giving rise to a potential claim" (Aiken et al., 2020, p. 77). This time period is set by the state's statute and will be different for cases involving minors. Table 1 provides examples of several states' statutes of limitations and demonstrates the wide variance between states. Legal nurse consultants should be familiar with the relevant statute of limitations for the case being evaluated.

Medical Records Review

When reviewing a childhood cancer malpractice case, the legal nurse consultant should obtain the child's records from the primary care provider/pediatrician, oncologist, and any other relevant specialists. If the case involves neonatal cancer, the mother's obstetrical records should also be obtained. The records should include growth and development charts with appropriate pediatric flowsheets and parent/patient teaching tools.

Common Allegations

Lawsuits involving pediatric cancer typically allege a failure to diagnose, misdiagnosis, delay in diagnosis, or treatment-related errors. "A commonly identified theme related to diagnostic error is a failure to recognize a constellation of symptoms highly suggestive of malignancy. For example, a 10-year-old child is ultimately diagnosed with Ewing's sarcoma after 4 months of low back pain and multiple encounters with health care professionals" (Carberry et al., 2018, p. 16). Low back pain is a common complaint of adults yet suggestive of a pathologic condition in a child.

The Legal Nurse Consultant's (LNC's) Role in Evaluating Causation

Causation is a key issue in cases alleging a failure to diagnose cancer or a delay in the diagnosis of cancer. "The primary issue in a case involving delay in diagnosis and treatment of cancer is the impact of the delay on the outcome. In other words, did the delay worsen the prognosis or cause the patient to undergo more invasive or complication prone treatment?" (Zorn & Dickinson, 2016, slide 7.11). "When evaluating whether earlier diagnosis and treatment would have improved the outcome, the LNC needs to understand whether the delay caused the cancer to progress to a more advanced stage, and if so, the nature of the treatment options and disease-free survival associated with the different stages of the client's type of … cancer" (Zorn & Dickinson, 2016, slide 7.13). The LNC researches the most current medical literature for informa-

Table 1

MEDICAL LIABILITY/MALPRACTICE STATUTES OF LIMITATION		
State:	Statutory Citation:	Summary:
Florida	Fla. Stat. §95.11	Two years from injury or discovery, no more than four years from injury. If fraud, concealment of injury or intentional misrepresentation prevented discovery within four-year period, two-year additional extension from discovery, not to exceed seven years after the act. Minors: age 8.
Iowa	Iowa Code §614.1	Two years from reasonable discovery but not more than six years from injury unless foreign object caused injury. Minors under age 8: until 10th birthday or same as adults, whichever is later.
Massachusetts	Mass. Gen. Laws Ann. ch. 260, §4 and ch. 231, §60D	Within three years after the cause of action accrues, but in no event shall any such action be commenced more than seven years after occurrence of the act or omission which is the alleged cause of the injury upon which such action is based except where the action is based upon the leaving of a foreign object in the body. Minors under the full age of 6: shall have until 9th birthday in which the action may be commenced, but in no event shall any such action be commenced more than seven years after occurrence of the act or omission which is the alleged cause of the injury upon which such action is based except where the action is based upon the leaving of a foreign object in the body.

Note: Medical liability/malpractice statutes of limitation. Reprinted from National Conference of State Legislatures, by H. Morton, 2014, https://www.ncsl.org/research/financial-services-and-commerce/medical-liability-malpractice-statutes-of-limitation.aspx. Copyright 2014 by National Conference of State Legislatures. Reprinted with permission.

tion about "cancer treatment options and disease-free survival associated with different stages of cancer" (Zorn & Dickinson, 2016, slide 7.4).

CHILDHOOD CANCER CASE STUDIES

The legal nurse consultant's record review should include looking at any inconsistencies between the parents' description of the child's symptoms and the provider's physical exam, repetition of complaints, and lack of communication/understanding.

Expert witnesses for the case (e.g., pediatricians, oncologists, and other subspecialists) may also be helpful in identifying issues through medical record review. For example, a pediatric radiation oncology nurse with expertise in radiation oncology treatment plans could identify any discrepancies in the treatment schedule plan, missing records, dosing concerns, gaps in care, communication issues, issues with treatment of side effects, and lack of medical or nursing assessments throughout the course of treatment. Pediatric experts may address the child's growth and development status and psychosocial response based on age.

Delay in Diagnosis

Background: A six-year-old child experienced numerous complaints of pain, constipation, fever, fatigue, and sleeping difficulties. A nurse practitioner at a health clinic examined her, diagnosed constipation, and prescribed a suppository and juice. Two days later, a pediatrician confirmed the same diagnosis and prescribed a laxative. The child experienced no relief from her symptoms, so her parents brought her to the hospital a few days later. An x-ray showed massive distension of the child's spleen and an enlarged liver.

Diagnosis: The child was flight-lifted to another hospital, where she was diagnosed with acute lymphoblastic leukemia. The leukemia allowed cells to collect in the child's cerebral spinal fluid and form a spinal tumor, which caused paraplegia in the six-year-old.

Complaint: The mother sued the federally-funded health clinic for failing to diagnose cancer in a minor patient which purportedly led to a white blood cell clot and paralysis.

Outcome: The parties settled for $1.9 million after mediation. The lawsuit against the pediatrician (for allegedly not examining the patient's abdomen) is still pending. The child is now 9 years old and permanently paralyzed. Experts in pediatrics and oncology were utilized (Cash v. United States of America, 2015).

Insight: Each individual sign and symptom is fairly common yet, together, they were evidence of a serious disease. In such a case, the legal nurse consultant's review would include the thoroughness of the histories of present illness and the physical examinations, documentation, and follow-up instructions (particularly if the symptoms did not improve with the prescribed treatments). Rapid doubling time of the acute leukemic cells can cause drastic physical changes.

Failure to Diagnose

Background: The mother of a six-month-old baby noticed her daughter's right eye would turn in. She maintained she repeatedly reported this to the physician, who refused to provide an ophthalmology referral.

Diagnosis: The baby was diagnosed with retinoblastoma at age 2. Her right eye was surgically removed.

Complaint: The baby's mother sued the physician for failure to provide an appropriate referral to an ophthalmologist, failure to properly examine the child, and failure to adequately communicate with the mother.

Outcome: The baby's mother settled the case for $750,000 (Buffa, 2009).

Insight: The child's parent/caregiver may casually mention an unusual observation about a child. Following up on those comments could save a child's life. In such a case, the LNC assesses the documentation for evidence (or lack thereof) of the mother's complaints and the provider's related observations and assessment findings. The clinical evaluation and specific recommendations for the follow-up timeframe should be clearly spelled out in the plan section of the progress note.

Treatment-related Error

Background: The prescribed formula for IV chemotherapy for a 2-year-old cancer patient called for a saline base of 1%. A pharmacy technician prepared the medication in a saline base of 23%, and the supervising pharmacist did not inspect or approve the IV before it was sent to the unit and administered to the child.

Outcome: The toddler died because of the mistake. The supervising pharmacist was charged with involuntary manslaughter, pled no contest, and served time in jail. In addition, the pharmacist's license was revoked.

Insight: This case highlights that not all errors happen at the bedside. Multiple professionals are involved in the continuum of care for pediatric cancer patients, and each has the responsibility to independently review and check all aspects of the care one is delivering. This case also illustrates the potential criminal and regulatory consequences healthcare providers may face when errors are made (Institute for Safe Medical Practices, 2009).

Key Take-Aways

- Childhood cancer, though rare, is the leading cause of death from disease past infancy in children (National Cancer Institute, 2020).
- Childhood cancer signs and symptoms are nonspecific, and initial identification is often difficult.
- Children and adolescents are at greater risk for medication errors.
- The statute of limitations for malpractice cases involving minors vary widely by state.
- Common allegations in pediatric cancer cases are related to diagnostic errors (e.g., missed diagnosis and failure to diagnose) and chemotherapy and/or radiation treatment errors.
- Causation is a key issue in cases alleging a failure to diagnose cancer or a delay in the diagnosis of cancer.
- Expert witnesses in the specialty will identify gaps in care and specific treatment miscalculations, and they will have familiarity with specific documentation requirements.

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Fighting for our Children

Jim Davey

Keywords: Guardian ad Litem, child welfare, foster care, adverse childhood experiences, dependency court system, Child Advocate Manager

Children are being removed from their homes daily and placed in the custody of the dependency court system. These kids are taken from their families and placed in foster care – some with relatives but many in licensed foster care homes or group homes. These kids are traumatized, and they feel all alone. Without parents available to speak for them, the child's fate falls into the hands of the courts. Who will give these kids a voice? Who will stand in the gap?

She was only 10 years old and separated from her mother. Her grandmother, who had stepped up to take her in when her mom's parental rights had been severed, had died. Her mother was getting out of prison but was still fighting her own demons. The little girl was now living with a stranger - someone trained in medical foster care since the girl had recently been diagnosed with type 1 diabetes. Her father was long gone.

He and his brother were abandoned by their mother when she left them with her old boyfriend and gone her own way. His brother had been placed in a foster home while he had been placed in a group home. He was 14, had been diagnosed with ADHD, and was on psychotropic medication. He was sullen and moody and talked constantly about living with his father who had not been a part of his life since he was 8 or 9.

She was 7 when her mother was murdered by her baby sister's father. She and her three siblings all had different fathers, but none of them were involved in their kids' lives. In fact, most of

the fathers had not been identified. Her aunt and uncle took all four kids into their home and provided safety, although the little girl still worried her stepfather would find them somehow.

He was only 4 and had been removed from his mother and his father. He had lived with his grandmother, then his paternal aunt and uncle, a paternal cousin, and even therapeutic foster care. In his short life, he had lived in 28 different homes due to his parents' drug issues. He had been temporarily committed to a psychiatric facility after attempting to smother an infant with a blanket and was started on a powerful psychotropic medication due to being diagnosed with Oppositional Defiant Disorder and Reactive Attachment Disorder.

These are just a few of the real stories of kids who are growing up voiceless. In the United States, there are over 400,000 children in the foster care system (U.S. Department of Health and Human Services, 2020). In Florida, where I live, there are a reported 19,000 kids in foster care (Jones, 2019). In Hillsborough County, Florida, the county with the largest number of kids in foster care in the state, there are more than 3,500 neglected, abused, and abandoned children (O'Donnell, 2018). This is where I work in the child welfare system as a Guardian ad Litem.

These kids have been removed from their homes and placed in the custody of the dependency court system. These kids are taken from their families and placed in foster care - some with relatives but many in licensed foster care homes or group homes. These kids are traumatized, and they feel all alone. Without parents available to speak for them, the child's fate falls into the hands of the courts.

Without parents available to speak for them, the child's fate falls into the hands of the courts. That is where the Guardian ad Litem program comes into the picture. We give kids a voice.

That is where the Guardian ad Litem program comes into the picture. We give kids a voice. Guardian ad Litem means "acting on behalf of another as their protector." A Guardian ad Litem in the state of Florida is often a volunteer who stands with a child to ensure the child's best interests are represented. To do that, the Guardian will get to know the child and discover the child's needs. The Guardian will try to get a 360-degree view of the child, advocating for the physical, emotional, mental, educational, medical, and relational wellbeing of the child.

For instance, what normally happens when a child becomes ill? Normally, a parent ensures the child sees a medical professional. That parent makes an appointment with a doctor, talks with a nurse, or drives the child to the emergency department. Who will do that for a child in foster care? The Guardian makes sure someone is paying attention to the needs of these kids. The Guardian pulls the necessary people together (including medical personnel) to ensure the child does not just survive but actually thrives.

The Guardian will also try to get to know the parents, helping to ensure they are moving in the right directions to reunify with their children. The Guardian will ask questions to see if that parent really does have the best

interest of the child in mind. Will the parent put aside his or her own issues to ensure this child is cared for in all areas - physically, emotionally, medically, socially, and more? If it becomes evident the parent is not willing to make the necessary changes and, thus, reunification is no longer in the best interest of the child, the Guardian works with others to help the child find a forever home through adoption.

The Guardian ad Litem works with a small internal team that includes the Child Advocate Manager and the Child's Best Interest Attorney. The Guardian will also collaborate with the foster parents, the case manager, and many others including teachers, doctors, nurses, and therapists to achieve the child's best interest. And yes, the Guardian will appear before the judge to speak for the child. But it requires this entire team of people mobilized to help the child move beyond his or her reality to a better future.

Take, for example, the aforementioned young girl who had been diagnosed with type 1 diabetes. She was placed in a medical foster home with a woman who was caring for two other young children – a three-year-old who was cognitively delayed and another three-year-old who had seizures. This foster mom had training to deal with these severe medical issues, but she relied heavily on the nurse assigned to her.

This medical foster care nurse would come to the home and provide medical guidance to the caregiver for all three children. For the young diabetic, that included monitoring the girl's glucose levels to assure they did not get too high or too low. Like other 10-year-olds, this girl loved snacks and would even sneak them at times regardless of the problems it created for her medically. She had at least two hurried trips to the emergency department due to issues that occurred with dangerous glucose levels.

This child's team also included the school nurse, who would check the girl's glucose level before lunch to ensure it was safe for the girl to take her insulin shot. The child (at age 10 - when kids should be just kids) had learned how to give herself her insulin shot.

As the Guardian, I worked hand-in-hand with the medical foster care nurse assigned to make sure foster kids like this young 10-year-old received the necessary medical care her condition required. Through this coordinated effort and working with Medicaid providers, we assured the young girl received the necessary equipment recommended by her endocrinologist, such as a wireless-enabled "smart" insulin pen, to help monitor her glucose levels. It would give the endocrinologist appropriate and real time data to help adjust doses when necessary.

I can remember one meeting the medical foster care nurse coordinated at the school to discuss how we could advocate for this young lady medically. Around the table was a group that might be called her medical management team: the licensed practical nurse from the school, her registered nurse supervisor, the medical foster care nurse, the social worker, the medical foster care parent, the uncle and aunt who wanted to adopt her, the Guardian ad Litem, and the endocrinologist by phone. All of us were there to advocate for the best interest of this child.

But the real breakthrough was a continuous glucose monitor worn on the upper arm that allow diabetics to see their blood sugar levels throughout the day and night via a sensor that is inserted under the skin. It eliminates constant finger sticks while allowing continuous monitoring of glucose levels. It could literally save this child's life! The medical foster care nurse and I coordinated our efforts to advocate for it and have the insurance companies fund it. All of this would have been impossible without a team approach to her medical care.

It all may sound somewhat glamourous and heroic, but the reality is often more disappointing and discouraging. While the goal is admirable, the road to the outcome of permanency for a child is filled with huge roadblocks and potholes. The system is decidedly broken, and the people within the system are equally broken. The goal is not to find perfect parents for these children but to help them find parents who act decently toward them and who do not take out their problems on them.

In fact, these kids have been doubly traumatized. First, they face the trauma of being abused or neglected by the very people who should be caring for and protecting them from harm. Then they are traumatized by being taken from their families and often separated from siblings since there are not enough homes that will take multiple kids. These kids have had more than their share of adverse childhood experiences (ACEs) and are facing an uphill battle to normalcy.

Adverse childhood experiences are potentially traumatic events that children experience anytime from birth to 17 years of age. Some of those experiences include suffering violence, neglect, and abuse; witnessing violence in the home; growing up in a home with substance misuse; and having a parent incarcerated.

If a child experiences four or more ACEs, he or she is more likely to have trouble forming healthy relationships as an adult, have abnormal brain development, struggle to maintain a job as an adult, experience chronic illnesses such as cancer and heart disease, experience a teen pregnancy or sexually transmitted disease, have trouble academically, and much more (Centers for Disease Control and Prevention, 2020). This cycle of trauma in a kid's life leads to serious

mental and physical health issues, not to mention the emotional scarring that occurs.

Many of the children we deal with in the child welfare system have had four or more ACEs. It is challenging to add enough positive experiences to counteract these negative experiences, especially since these negative experiences are perpetrated by people whom children are supposed to trust more than anyone else in the world: their parents.

It often feels like we are putting these families together with duct tape and Elmer's glue, hoping they will not be back in the system again. It is easy to see these broken people and think it is not worth the effort. Why place these kids back into homes with parents who have not decided their kids are going to be more of a priority than their own agendas? Would it not be easier to simply take these kids from these lost parents and put them with new parents in adoptive homes?

First, that assumes there are people waiting in line to adopt these kids in their homes, as if there are an abundance of perfect homes waiting for these misfit kids. We have the mistaken belief some mythical "Rudolph" will show up with Santa ready to take all the kids to homes where they will be loved. Unfortunately, that is untrue. There are some really good adoptive homes waiting for kids, but there are not enough of them. Furthermore, most adoptive parents want babies or at least kids under 5. What about the large number of foster kids who are older?

Second, the reason reunification with parents should be our first option is these kids, for the most part, want to go home. Sure, they know their parents are messed up, but they also love their parents. These kids are connected to a culture, to a people, to a history, and we should try our best to ensure they stay connected to family. Let us be honest: there are no perfect parents. All parents are flawed. Why not give these parents some necessary tools to improve their parenting since many of them never learned how to parent in the first place?

Third, consider the reasons why most kids are removed from their homes in the first place. Most of these kids do not experience direct egregious physical or sexual abuse. Most children in Florida are removed due to domestic violence and substance abuse. In other words, most of the kids are experiencing harm due to their parents hurting each other or self-medicating.

These parents' actions do place kids in harm's way, and this exposure will seriously affect the children. Many kids are caught in the middle of the domestic violence or substance misuse and become direct targets. However, these parents have a chance to unlearn these unhealthy ways of dealing with stress and frustration in order to keep violence and drug use from their lives and the lives of their children.

There are days in my role as a Child Advocate Manager for the Guardian ad Litem program in Hillsborough County when I would rather just whisk these kids away from these parents and place them in new homes. Why give them second or third or even more chances? But I quickly remember there are not enough qualified adoptive homes to go around. We do not even have enough qualified foster parents.

I also recall that people can change. Is it easy? No. Have I countless examples of changed parents? No. But I do have stories of some who have put in the hard work in order to get their kids back. And that gives me hope. I also have stories of grandparents, aunts, uncles, other relatives, and friends who have stepped up and taken these kids into their homes when the parents fail. This gives these kids a chance to stay connected to their heritage, to their families.

The four kids mentioned earlier are voiceless. These children need people who are willing to jump into their world, get to know them and their stories, and advocate for them to make sure their past does not define their future. They need teachers and coaches, foster parents and relatives, doctors and nurses, therapists, attorneys and judges, and yes, Guardians ad Litem. It will take all of us working together to help this child find a permanent, loving home. It will take all of us standing in the gap and saying to these kids, "We see you, we hear you, and we will not let you be forgotten!"

For more information on the Guardian ad Litem program, check out www.guardianadlitem.org.

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Jim Davey lives in Lakeland, Florida with his wife Mary, who is a pediatric nurse. He feels honored to be able to support and encourage their three married children and six grandkids. Jim also enjoys reading, golfing, boating, and hanging out with people of all ages.

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