Annual Report 2017

Our story begins with you.

NISWONGER Children's Hospital
We believe that seeing a kite lift from the ground and flutter in the breeze is a sign of hope and healing. The children and teens we serve at Niswonger Children’s Hospital are the future of this region. We work every day to be the place that makes kites fly, to help and heal the young people of this region — and, ultimately, to make hope rise.
Greetings from Niswonger Children’s Hospital!

This has been another wonderful year for Niswonger Children’s Hospital! We continue to be committed to the quality of care we provide the children and teens across the 29 counties that we serve. It is our goal that each patient is treated on an individual basis, based on their unique needs. We are here to help them tell their story.

As the sole children’s hospital in the region, Niswonger Children’s Hospital is passionate about the health of the pediatric population in our community. We are proud to be able to offer unrivaled healthcare services to our children and teens close to home. I hope the following pages will give you better insight into the services and specialties offered by our highly trained team.

My passion for children’s health care began with the birth of my own NICU baby in 2001. I know firsthand the roller coaster that comes with an unexpected outcome at birth. Helping families and children navigate the complexity of healthcare and the stress of hospitalization continues to be my driving force. I know how it feels to hand your child — your most precious gift — over to strangers for care. I understand the anxiety and stress that a sick child can bring, so my desire to ease that burden on families stems directly from my story.

I cannot thank you enough for your continued support of Niswonger Children’s Hospital, our programs, physicians, team members and patients. Without our dedicated team members and generous surrounding community, this excellence would not be possible. We will continue to look outside the walls of our hospital for new opportunities to impact the lives of children. We will also continue to take a proactive approach to healthcare so that children thrive within this region. Together, we look forward to positively impacting the health and lives of our region’s children and teens.

Lisa Carter
Assistant Vice-President/Chief Executive Officer
Niswonger Children’s Hospital
Babies born with neonatal abstinence syndrome (NAS) have special needs. In addition to requiring medication and extra attention, they are often very sensitive to noise and light that normally would not distress an infant.

In a response to a region-wide epidemic of babies born dependent on drugs, the Legacy Mountain States Foundation raised funds for a special unit within Niswonger Children’s Hospital ideal for caring for babies who are born with neonatal abstinence syndrome.

- NAS occurs when babies are born dependent on prescribed medications or illegal substances that the mother has used during pregnancy. Opioids (painkillers) or benzodiazepines (for anxiety or sleep) are the most common medications that cause NAS, but other drugs, legal and illegal, may also be the cause.

- Pregnant women may be using medicine as prescribed, for addiction or pain treatment, or may be using medication or substances inappropriately. These newborns may need to stay in the hospital longer than other full term babies.

- After being born, babies experiencing NAS go through a painful and uncomfortable withdrawal process that can last from days to months.

- The babies often have a distinctive cry, may suffer from agitation, gastrointestinal problems and high sensitivity to light and noise.

This 17-room unit is an excellent healing environment for babies suffering from NAS. We anticipate this soothing environment will shorten the amount of time these babies must spend in the hospital. The unit also provides private rooms for families who need additional time and space to bond with their babies.
Child Life Services

Our specialists are trained professionals who help children, teens and their families overcome challenging events. They provide emotional support for children, families and caregivers.

During a hospital stay, children and teens may be faced with stressful and traumatic situations that could overwhelm their ability to cope and heal.

Children and teens process information much differently than adults, and therefore have distinct needs in managing the effects of stress and trauma. With the help of a child life specialist, pediatric patients and their families at Niswonger Children’s Hospital receive the help they need to overcome some of life’s most challenging moments. Child life specialists are experts in child development and promote effective coping through play, preparation, education and self-expression activities.

Child life specialists help patients effectively manage stress and heal faster. Children and teens may experience emotions such as fear, shame, confusion and loneliness when staying in the hospital, and these feelings can inhibit their natural development.

Our team understands that a patient’s well-being depends on the support of families and caregivers, and works with each family to provide the information, guidance and help they need.
Gideon is a part-time pediatric oncology patient at Niswonger Children’s Hospital ... and a full-time smile master!
Neonatal Intensive Care Unit (NICU)

As a Level III-designated facility, the Niswonger Children’s Hospital NICU has the capacity to manage the most complex and severe maternal and neonatal illnesses. We are the regional referral center for neonatal medical needs.

The Niswonger Children’s Hospital Neonatal Intensive Care Unit (NICU) is a top facility in Tennessee, treating about 600 babies a year. Our NICU is one of only five state-designated Perinatal Centers in Tennessee. Physicians specializing in the care of newborns are joined by specialty-trained nurses, dieticians, respiratory therapists, social workers and pediatric subspecialists who work as a team to provide the best care possible for our babies and their families.

As a part of the Northeast Tennessee Regional Perinatal Centers for high-risk pregnancies, the Perinatal Center provides diagnosis and treatment of life-threatening conditions of pregnant women and their babies.
Tanaya

Sickle Cell Anemia

Tanaya is a ballet dancer. She’s also a gymnast and cheerleader.

Not long ago, Tanaya spent a lot of time in the hospital because she has sickle cell anemia, which means there aren’t enough healthy red blood cells to carry adequate oxygen throughout her body. As a result, these red blood cells can slow or block blood flow.

When Tanaya was 2 months old she had her first sickle cell crisis, a very painful and serious event. From that time on until she was 7 years old, she was in and out of the hospital 150 times or more until doctors could get her stabilized with medication.

Her physicians in hematology services at Niswonger Children’s Hospital found a treatment that has given Tanaya her childhood back.

“The hospital provides her with a drug, hydroxyurea, that has been a night-and-day success,” said David, Tanaya’s father. “We went from being in the hospital every few months to no hospitalizations in five years.”

Together, they still have to be vigilant about her health, but thanks to the treatment Tanaya receives from Niswonger Children’s Hospital, she’s able to enjoy being a normal, active kid, and living a productive life.
Chloe
Pediatric Oncology Patient

Chloe has been an ongoing patient at Niswonger Children’s Hospital for almost eleven years now. Her caregivers say she’s quiet and cooperative. Nurses and Child Life Specialists always stop by during Chloe’s treatment to see if she needs anything, and she has always said no ... until recently. Team members Dee Bowman, Cathy Stull and Kate Strickland found out the one thing Chloe really wanted was a puppy. They knew that due to her health issues, the only kind of dog that Chloe could have would be a poodle. After clearing it with Chloe’s mom, Dee, Kathy and Kate decided to find Chloe her perfect, new best friend. During a recent visit to Niswonger Children’s Hospital for a treatment, they surprised Chloe with a puppy party, where they showered her with puppy food, a puppy crate and other poodle-friendly goodies. Then they surprised her with the best news of all — her new best friend Jake was on his way to Chloe’s house!
Pediatric Emergency

The Niswonger Children’s Hospital Emergency Department offers state-of-the-art care dedicated to pediatric patients and is the only pediatric-specific emergency department in the region. Our emergency physicians and nurses are all pediatric specialists.

Our emergency room is unique.
We offer specialized pediatric care in our eight patient rooms and four transitional rooms. Our emergency physicians and emergency nurses are all pediatric specialists. We are dedicated to our pediatric patients, and have a family-friendly waiting room with safe play areas and toys for children.

Full access to advanced care
In the event a child or teen requires advanced care, the Children’s emergency medical staff has access to the pediatric specialists from Niswonger Children’s Hospital as well as full access to the wealth of services available at Johnson City Medical Center. Patients who need inpatient care do not need to be transferred to another facility. They are admitted to Niswonger Children’s Hospital, located on the same campus as Johnson City Medical Center.

Why is an emergency department dedicated to children important?
Children and teens needing urgent and emergency care have unique and special needs, requiring medical professionals who specialize in the care of children, as well as equipment designed for all sizes, from babies to young adults.
Endocrinology & Diabetes

The pediatric endocrinology and diabetes team provides care for children with hormone and gland problems, including type 1 and type 2 diabetes, growth disorders, thyroid disorders, pubertal disorders and other disorders related to hormonal dysfunction.

Examples of services provided by pediatric endocrinology include:

- Adrenal gland hypo/hyper function
- Ambiguous genitals/intersex
- Diabetes
- Early or delayed puberty
- Enlarged thyroid gland (goiter)
- Growth problems, such as short stature
- Low blood sugar (hypoglycemia)
- Ovarian and testicular dysfunction
- Obesity
- Pituitary gland hypo/hyper function
- Problems with Vitamin D (rickets, hypocalcemia)
- Underactive or overactive thyroid gland

George Ford, MD
Pediatric Endocrinology

Evan Los, MD
Pediatric Endocrinology

Alexis Duty, NP
Pediatric Endocrinology
Neurology

Niswonger Children’s Hospital specializes in the diagnosis, management and treatment of children with a variety of neurologic conditions. We provide services for:

- Cerebral palsy
- Developmental delays
- Headaches
- Neuromuscular disorders
- Seizure disorders
- Tics

Treatment programs are designed to offer children a thorough diagnosis and carefully managed treatment plan through our comprehensive, family-centered approach to care. Our extended care team is committed to educating and empowering each child’s caretaker network to ensure the highest quality of life possible.

Kathryn Xixis, MD
Pediatric Neurology

Amie Jarrett Briggs, NP
Pediatric Neurology
Gastroenterology

From a simple stomachache that just won’t go away to more complex conditions related to nutrition or liver problems, Niswonger Children’s Hospital is here.

Each child gets a customized plan and approach from our team of experts in pediatric gastroenterology. If your child has chronic abdominal pain, reflux or a more complicated condition like short bowel syndrome or Crohn’s disease, or symptoms that haven’t yet been diagnosed — our team of experts can help. We are dedicated to answering your questions and getting to the root of your child’s discomfort.

Anjali Malkani, MD
Pediatric Gastroenterology

Courtney Murphy, NP
Pediatric Gastroenterology
When Layne took her daughter Kyah to an urgent care clinic for shoulder and abdominal pain, tiny red dots on her lower legs caught the doctor’s attention as a possible sign of something serious. Testing confirmed the physician’s suspicion — Kyah had leukemia.

Soon after, Kyah arrived at Niswonger Children’s Hospital for treatment, terrified and in tears. The child life specialist soothed her fears with a bag of treats and a compassionate explanation of the procedures and treatments she was soon to face. Today, Kyah bounces into Niswonger for her treatments with a big grin, excited about seeing her special friends.

“Sometimes you actually have a fun time and forget you’re getting chemo,” says Kyah. “Sometimes it’s hard, but you get through it.”

How does a kid get through the worst nightmare ever? With compassionate care at a place like Niswonger Children’s, designed just for kids — where fear turns to fun, horror to hope and tears to trust.
Niswonger Children’s Therapy Services

The Niswonger Children’s Therapy Services department comprises physical, occupational and speech language pathologists. We are dedicated to partnering with you, your child’s physician and/or school to achieve the very best possible outcome and quality of life.

We work as a team to develop individualized therapy programs that optimize development and address rehabilitation needs for children and teens with developmental delays, special needs or critical illnesses. Our team approach and friendly environment helps children reach age-appropriate and condition-appropriate goals. We want each child to reach his or her maximum potential.

**Speech Therapy**
Eating and communication can be challenging for children with underlying delays or disorders. A speech language pathologist encourages learning experiences to help children and their parents develop skills that foster successful mealtimes and create confident communicators.

**Physical Therapy**
Our physical therapists use their expertise in development and movement to help children and teens participate in activities at home, at school and in play. The goal of physical therapy is to assist the child in achieving his/her maximal functional potential, while reaching their developmental milestones as they grow.

**Occupational Therapy**
A child’s occupation is to be a kid! Through the use of play, our occupational therapists help children acquire the skills needed for the job of living. This includes promoting independence in daily living skills such as dressing, grooming, feeding and handwriting.
St. Jude Tri-Cities Affiliate Clinic  
at Niswonger Children’s Hospital

Pediatric Hematology/Oncology Services

The St. Jude Tri-Cities Affiliate Clinic at Niswonger Children’s Hospital is a partnership among the St. Jude Children’s Research Hospital, ETSU and Niswonger Children’s Hospital. It was established in 1999, and is an outpatient clinic staffed by three pediatric hematology/oncology physicians, and a nurse practitioner, in addition to many other clinic support team members. The St. Jude Tri-Cities Affiliate Clinic offers children and young adults the highest quality of care with compassion and dedication.

We think of the St. Jude Affiliate program as a “hospital without walls.” The Tri-Cities Affiliate is part of the St. Jude mission to extend the protocol-structured treatment and research at St. Jude through clinical, research and academic partnerships with pediatric programs. The professionals at the St. Jude Tri-Cities Affiliate Clinic at Niswonger Children’s Hospital work in collaboration with the staff at St. Jude Research Children’s Hospital to deliver protocol-related care to hematology and oncology patients.

The St. Jude Tri-Cities Affiliate Clinic at Niswonger Children’s Hospital is one of only eight clinics in the nation that are part of the St. Jude Domestic Affiliate Program. The clinic meets the rigorous care standards required by St. Jude, and is subject to annual audits that confirm our ongoing capability and commitment to quality. The St. Jude Tri-Cities Affiliate receives more than 2,600 outpatient visits annually and follows more than 300 children with malignancies; they also treat many children with congenital bleeding disorders and a variety of other hematological problems. The First Regional Hemophilia Program, a state sponsored program for congenital bleeding disorders, is housed in the St. Jude Tri-Cities Affiliate and has quarterly clinics for children and adults with hemophilia.

Marcela Popeseu, MD  
Hematology/Oncology  

Abigail Cruz, MD  
Hematology/Oncology  

Angela Willocks, NP  
Hematology/Oncology
When Emily took her 4-year-old son James to the pediatrician, she expected him to be treated for a bad cold or childhood allergies. Instead, the news was life-changing — James was diagnosed with acute lymphocytic leukemia, a type of cancer of the blood and bone marrow.

At first, coming to Niswonger Children’s Hospital for his weekly treatments was scary and upsetting; but a treasure box of toys, an X-Box to play, child life specialists who made James feel comfortable, and doctors and nurses who have become his friends helped to ease his fears.

Still, because of his lowered immune status, James can’t go to school or play with other kids, a hard pill to swallow for an active little boy who loves sports, superheroes and playing with friends. The Niswonger Children’s team even found a remedy for that. “They scheduled another little boy to receive his treatment on Thursdays, too, so he and James could be buddies,” says Emily. “Now James looks forward to Thursdays when he knows he’ll see his friends at the hospital.”
Perinatal Care Certification

Johnson City Medical Center and Niswonger Children’s Hospital have received Perinatal Care Certification from the Joint Commission — the premier healthcare quality improvement and accrediting body in the nation.

**Why is this important?**

Perinatal Care Certification means Johnson City Medical Center’s Family Birth Center and Niswonger Children’s Hospital’s Level III Neonatal Intensive Care Unit provide the very best care for mothers and their babies — all under one roof. Our hospitals are the best choice in the region for higher-risk labor and delivery, and the only such facilities equipped to care for our littlest patients, who might need additional care in their first weeks or months of life.

Both hospitals underwent a rigorous onsite review to assess compliance with certification standards for perinatal care.

During the review, Joint Commission experts completed an independent evaluation of both patient care areas, as well as the following key requirements:

- Available patient education and information about perinatal care services
- Early identification of high-risk pregnancies and births
- Integrated, coordinated patient-centered care that starts with prenatal and continues through postpartum care
- Management of mothers’ and newborns’ risks
Orthopedics

In 2016, Niswonger Children’s Hospital brought pediatric orthopedic care to the doorstep of children in Johnson City, Tennessee and the surrounding 29-county service area. Whether children suffer a sports injury or from a more complicated deficiency or abnormality, Niswonger Children’s Hospital offers specialized treatments tailored to each child’s specific need.

We have special expertise in the following areas:

- Brittle bone disease
- Cerebral palsy
- Clubfoot and other problems of the foot
- Limb deficiencies and prosthetic restoration
- Pediatric sports injuries
- Scoliosis and other spinal abnormalities
- Spina bifida

Brandon Green, MD
Pediatric Orthopedic Surgery

Alison Herrig, NP
Pediatric Orthopedics
Macey was born with her hips internally rotated. For years, doctor after doctor referred her to physical therapists with no improvement in her condition. Thanks to Dr. Brandon Green, Macey is now able to walk, run, dance and play normally. She was so excited to dance at Homecoming this year.
Medical Services

Children and teens need healthcare that is tailored to their unique needs, involves their parents or caregivers from start to finish and is provided in places designed to be child-friendly. That’s why the children and teens of our region need Niswonger Children’s Hospital. This hospital provides for the unique needs of children and combines compassionate, personalized care with state-of-the-art technology. Niswonger Children’s Hospital is dedicated to ensuring that every patient has access to the very best pediatric healthcare services.

• Adolescent Gynecology
• Adolescent Medicine
• Allergy and Immunology
• Cardiology
• Child Abuse Pediatrics
• Children’s Resource Center
• Critical Care
• Dentistry
• Dermatology
• Emergency Medicine
• Endocrinology
• Gastroenterology
• Hospitalists
• Infectious Disease
• Neonatology
• Nephrology
• Neurology
• Niswonger Children’s Therapy
• Orthopedic Clinic
• Perinatology
• Pharmacology
• Pulmonology
• Radiation Oncology
• Radiology
• St. Jude Tri-Cities Affiliate Clinic
• Surgery
• Virtual Health Clinic
Pulmonology & Asthma

Niswonger Children’s Hospital offers comprehensive treatment of congenital, inherited and acquired disorders of the lungs and respiratory system. Our team integrates clinical care with the latest education to ensure a top-level of care to our patients.

Asthma Care

Asthma is a long-term breathing condition caused when tubes carrying air to the lungs become smaller because of swelling or tightening muscles. During an attack, patients find it hard to breathe, often gasping for breath.

Many children with asthma need two types of medicine: controllers, also called every day medicines, and quick relievers. Controller medicines help keep airway swelling down and must be used daily, even when the child is feeling well, in order to work best. They are not helpful during an asthma attack, but can help prevent asthma attacks. Quick-reliever (also called rescue) medicines help kids who are having trouble breathing. These medicines make it easier to breathe during an asthma attack and also can help with less serious problems such as coughing or wheezing caused by a cold.

Asthma Attacks

Asthma attacks happen less often if triggers are avoided. Triggers are things that cause people with asthma to cough or wheeze. Some common triggers are:

- Cigarette smoke
- Cold air
- Colds and illnesses
- Dust
- Pets
- Playing hard or exercising
- Season changes
- Weather changes
Serving 29 counties

Niswonger Children’s Hospital offers over 20 specialty services, with pediatric trained physicians and nurses. We serve the 29-county region, in our state-of-the-art facility specifically created for the care and healing of children.

18,818
Tennessee

Pediatric Patients by County

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<th>Inpatient/Outpatient</th>
<th>Carter</th>
<th>Greene</th>
<th>Hawkins</th>
<th>Johnson</th>
<th>Sullivan</th>
<th>Unicoi</th>
<th>Washington</th>
<th>Other Areas</th>
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<td></td>
<td>199/2,253</td>
<td>145/876</td>
<td>98/313</td>
<td>46/300</td>
<td>393/2,623</td>
<td>60/850</td>
<td>587/9,864</td>
<td>20/191</td>
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2,633
Virginia

Pediatric Patients By County

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<th>Dickenson</th>
<th>Lee</th>
<th>Norton City</th>
<th>Russell</th>
<th>Scott</th>
<th>Smyth</th>
<th>Tazewell</th>
<th>Washington</th>
<th>Wise</th>
<th>Wythe</th>
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<td>40/77</td>
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131
North Carolina

Pediatric Patients by County

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<td>6/21</td>
<td>2/18</td>
<td>1/9</td>
<td>6/37</td>
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101
Kentucky

Pediatric Patients by County

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<th>Letcher</th>
<th>Other Areas</th>
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<td>13/15</td>
<td>0/2</td>
<td>5/56</td>
<td>0/10</td>
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</table>
We treat patients from 0 to 18 years old.

- 37.59% Infants
- 21.44% Little Kids
- 15.89% Big Kids
- 14.79% Tweens
- 10.79% Teens

**By the numbers FY2017**

- 17,561 Emergency Patients
- 30,318 Outpatient Visits
- 2,704 Inpatient Care Admissions
- 18,672 Total Inpatient Days
- 2,263 Pediatric Surgeries
- 626 NICU Patients
- 552 PICU Patients
- 1,150 Orthopedic Clinic* Visits
- 55 Orthopedic Surgeries
- 5,675 Pediatric Oncology Outpatient Treatments
- 2,697 St. Jude Tri-Cities Affiliate Clinic Outpatient Visits

*Orthopedic clinic statistics from January to July 2017
Becoming a “triple-threat” performer — singing, dancing and acting — is 11-year-old Patiance’s goal despite the immune deficiency that plagues her with fatigue, narcolepsy, a heart murmur, and susceptibility to all childhood diseases even though she’s been vaccinated and revaccinated for all of them.

Gwendolyn says that she and her husband, Chico, had no idea why their resilient daughter was continually sick. Finally, she was diagnosed with Specific Antibody Deficiency, a type of Common Variable Immune Deficiency (CIVD). That means that every three weeks Patiance visits Niswonger Children’s Hospital for medical tests, doctor visits and to have an IVIG (intravenous immunoglobulin) infusion of antibodies that her body doesn’t make. She’ll need these infusions for the rest of her life.

“When we went to Niswonger Children’s Hospital for her first infusion, a child life specialist helped her start a mock IV on a stuffed bear,” says her mom. “After that, she wasn’t scared anymore. Now, she loves to go and says the staff is like her family.”

Thanks to the infusions, Patiance has fewer illnesses and more endurance to sing, hang out with friends, and even attend practices at Jonesborough Repertory Theatre where she’ll perform in a musical.

“Niswonger Children’s Hospital has been a blessing and the staff is amazing,” says Gwendolyn. “I don’t know what we would do without them.”
For more information, call 423.431.6111
or visit balladhealth.org/children

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