





## They're counting on us

At the Aflac Cancer and Blood Disorders Center of Children's Healthcare of Atlanta, we care for more kids with cancer and blood disorders than anywhere else in the Southeast. As one of the largest programs of its kind in the country, we have a greater opportunity to see more, do more and learn more. It is this greater awareness, knowledge and expertise that bring us ever closer to finding a cure for these complex diseases.

With every passing year, we are making progress. To gauge our impact, we turn to the numbers:

**7,400**—average number of kids with cancer or a blood disorder that we care for each year

**1,300**—children enrolled in one of our clinical studies last year

**456**—children who were newly diagnosed with cancer that we cared for last year

**1,900**—average number of kids we care for through our sickle cell disease program

These numbers speak to our determination to find a cure for pediatric cancer and blood disorders. They are a testament to the success of our innovative approach to treatment and research. And they are evidence of our commitment to extend our reach and provide comprehensive care to as many children as possible.

Ultimately, however, it's not the numbers above that we strive for. We do what we do in the hope that one day we will achieve just one number ... **ZERO**.

When someone asks us how many children have cancer, we want nothing more than to say, "zero." When someone asks us how many children are living with pediatric sickle cell disease, we want to shout from the rooftops, "zero!"

We want to eliminate pediatric cancer and blood disorders so that no family has to ever face the challenges of fighting these diseases. We believe we can achieve this. But we can't do it alone. We need your support so that we can continue to help even more kids overcome childhood cancers and blood disorders.

It is my hope that after learning more about our current work and ambitious goals for the future, you will join us in our mission to end childhood cancers and blood disorders. I believe that every child deserves a lifetime, and we need you to help make that a reality.

Sincerely,

Douglas Graham, MD, PhD

Director, Aflac Cancer and Blood Disorders Center

Chief, Pediatric Hematology/Oncology/BMT, Emory University School of Medicine



## The Aflac Cancer and Blood Disorders Center: Mission No. 1



The Aflac Cancer and Blood Disorders Center is a national leader among childhood cancer, hematology and blood and marrow transplant (BMT) programs. We are recognized by U.S. News & World Report as one of the top childhood cancer centers in the country. Each year, we care for more than 450 newly diagnosed cancer patients and follow more than 4,000 patients with sickle cell disease, hemophilia and other blood disorders. Our mission: to eliminate these complex diseases once and for all.

As a member of the Children's Oncology Group (COG), we are enrolling as many kids as we can into clinical trials. In fact, the Aflac Cancer and Blood Disorders Center is in the top 2 percent nationally for therapeutic clinical trial enrollment. And because every physician is also a researcher, the knowledge we gain is shared openly with other pediatric cancer centers across the country, ensuring that more top minds are working toward our common goal.

Looking ahead, we believe our greatest hope is to build upon specific areas of strength. We have become one of just a few pediatric cancer programs nationally that offers specialized Precision Medicine and Cancer Genetics and Predisposition Programs, and we see potential to be on the forefront of these novel approaches to diagnosis and treatment. To support our growth, we will continue recruiting faculty members who have expertise in key areas of basic and clinical research and increasing our clinical staff.

We're confident that, with your support, we can continue to build on this foundation of excellence, innovation and collaboration until we reach our goal: a cure rate of **100 percent** for pediatric cancer and blood disorders.



## What we treat: Priority No. 1

At the Aflac Cancer and Blood Disorders Center, our team is highly skilled and experienced in treating children and young adults with all forms of childhood cancer and blood disorders—from the most common to those rarely seen.

### Pediatric cancers

Cancers that affect children from birth up to age 19 may be defined as "pediatric cancer." Just as children differ from adults, pediatric cancers are unlike adult cancers. They are very rare and unique in the way they spread and respond to treatment, so they require a specialized approach in order to manage them effectively.

### Blood disorders

There are a variety of non-cancerous blood disorders and conditions that affect children, from problems involving blood cells and vessels to the proteins that impact clotting. At the Aflac Cancer and Blood Disorders Center, we have dedicated teams of specialists focused on each specific type of disease to ensure every child receives the most current treatment available for their unique condition.



## Programs and services: Focusing on No. 1



Providing the highest quality care to kids with cancer or a blood disorder requires the ability to look beyond the illness and its treatment to focus on the whole child. At the Aflac Cancer and Blood Disorders Center, we have established a comprehensive approach to caring for children that incorporates advanced diagnostics and novel therapies as well as a variety of support services. Our programs and services include:

**Cancer Program:** We are home to one of the top childhood cancer centers in the country. We have doctors who are skilled in treating all forms of cancer, including leukemia, lymphoma, brain tumors and solid tumors.

**Blood Disorders Program:** We care for more than **4,000** children with hemophilia and other blood disorders each year. This includes more than **1,900** children with sickle cell disease, making us the largest pediatric sickle cell program in the country.

**Blood and Marrow Transplant Program:** As one of the top pediatric BMT programs in the country, we provide expertise in autologous and allogeneic transplants. In addition to treating malignant diseases like cancer, we also treat a variety of nonmalignant diseases with BMT, including sickle cell disease. We are a national leader in BMT for children with sickle cell disease, curing more than **70** children thus far.

**Developmental Therapeutics Program:** Our team focuses on the discovery and creation of new treatments for children with cancer and blood disorders, specifically the use of new drugs, combinations of drugs or ways of administering drugs that we hope will lead to better outcomes for the kids we care for.

**Survivorship Program:** We provide nationally recommended, long-term follow up care and resources for survivors of pediatric cancer, many of whom will experience a significant chronic health condition or cognitive difficulties after treatment.

**Cancer Predisposition Program:** We treat children under the age of 18 who are at risk for developing cancer due to a cancer predisposition syndrome, a family history of cancer or a diagnosis of a rare type of cancer.

**Innovative Research:** As one of the largest and most active institutions in the U.S. in pediatric clinical trial enrollment, our robust clinical research program offers patients access to more than 400 clinical studies, including some of the most novel treatment options in the country. Our skilled team of researchers is committed to the early translation of basic clinical research findings into medical practice to give more patients access to promising new therapies when they need them most.

**Psychological Services:** Psychologists help patients and families address the emotional, cognitive and behavioral challenges associated with the diagnosis and treatment of cancer and blood disorders. They conduct psychological testing and work to develop strategies to help reduce stress, ease anxiety and improve communication to ensure children maintain a good quality of life both during and after their treatment.





## Greater options mean greater chances of overcoming complex cancer



When 2-year-old Emrie began to lose her hair, her mom, Jamie, carefully snipped off her curls. Her dad, Scott, then used his own clippers to shave the rest. “I was holding her as I shaved the last part and when I was done, Emrie reached up to feel her head,” Scott says. “I thought surely she was going to cry, but she just reached over and touched my head and said, ‘Just like daddy.’”

It was during the 2016 holiday season that Emrie first came to the Aflac Cancer and Blood Disorders Center with what doctors initially thought was an eye infection. A biopsy performed on Christmas Day, however, would confirm that the swelling around Emrie’s eyes was actually a side effect of acute myeloid leukemia (AML).

Emrie had seven cancerous lesions—behind both eyes, on her kidneys, lung and near the spine—that required immediate treatment. “We didn’t have a Christmas that year,” says Scott. “Emrie was admitted to the hospital right away and didn’t leave until after her first round of chemo, which was 10 days later.”

Emrie would need four rounds of chemotherapy in all, each requiring a hospital stay. There were hurdles along the way, including a sudden recurrence of cancer cells that appeared in her spinal fluid and a serious respiratory infection, but the treatment was successful.

“Over the course of six months, there were only two days that Emrie was too sick to get out of bed,” says Scott. “Most of the time, she was up running around, smiling, doing her own blood pressure cuff and playing with the thermometer. She was happy through the whole thing.”

On June 19, 2017, Emrie completed her last inpatient treatment and rang the end-of-treatment bell in front of a crowd of nurses, doctors and family there to cheer her on. When she left the hospital, Emrie took with her a heavy box full of colorful “beads of courage” she collected throughout her treatment. They represent every act of bravery, every needle stick, every test, every doctor exam she faced along the way. Today, Emrie is healthy and happy and busy playing with her brothers and sisters.





# Support the Aflac Cancer and Blood Disorders Center: Be our No. 1

Thanks to the generous support of donors like you, the Aflac Cancer and Blood Disorders Center is making a difference in the lives of children with cancer and blood disorders. Unfortunately, there's still work to be done—and we need your help to continue working toward our goal. By supporting one or more of the following areas of greatest need, you are making a positive impact on our mission to provide the highest quality of care to our patients today, tomorrow and for years to come.

## Family Support Team

The family support team works to care for the whole child and is critical to ensuring every patient's treatment journey is as positive as possible.

- **Chaplains** provide emotional and spiritual support to our patients and families of all faiths throughout the child's treatment journey. They also support staff members who develop close connections with each child and their family.
- **Child life specialists** help patients and their families cope with the challenges of illness and hospitalization. They use age-appropriate teaching tools to help a child understand and cope with their disease and treatment.
- **Music therapists** use music to connect with patients in a therapeutic way. They may help patients write songs to express their feelings about treatment, or teach them to play an instrument to help with breathing exercises that are critical to treatment.

## Cancer Survivorship Program

More than 85 percent of childhood cancer survivors experience a significant chronic health condition after treatment. Health problems that occur after treatment are called late effects, and they can include physical, psychological and social issues that may impact them long after treatment ends.

At the Aflac Cancer and Blood Disorders Center, we believe survivors of childhood and adolescent cancer who have been off treatment for approximately two years should have long-term follow-up care in a specialized survivorship program. Our cancer survivorship team helps address their unique needs by developing a long-term plan specific to each child to help them minimize and cope with the late-term effects of cancer and associated treatments. Identifying and treating these problems early helps survivors lead a full life: performing to the best of their ability in school, growing and developing normally, feeling strong and resilient, and even having a family of their own one day.

**With donor support, the survivorship team can continue to provide the ongoing support pediatric cancer survivors need to not only survive, but thrive.**

- **Teachers** provide instruction and bedside teaching to allow kids undergoing treatment to stay on track academically during their hospital stay. They also help coordinate re-entry plans with a child's school when it is time for the child to return to the classroom.
- **Social workers** link patients and families with community resources, as well as advocate for their emotional and physical needs during a diagnosis and treatment. For example, they may coordinate care for an adolescent who has aged out of the foster care system but is battling cancer and needs a place to stay during treatment.

**Although the services this team provides are vital, insurance does not cover them, which means we rely 100 percent on donor support to make them available to each child in our care.**



## Fellowship Program

At the Aflac Cancer and Blood Disorders Center, we are training tomorrow's leaders in pediatric hematology and oncology. We offer three-year fellowships in collaboration with Emory University School of Medicine to qualified, promising physicians. This fellowship program is among the largest training programs in the country and is the premiere program in the Southeast. Our program prepares academically oriented hematologists and oncologists for a lifetime of excellence in patient care, teaching and research.

We also offer fourth- and fifth-year subspecialty fellowships in BMT and neuro-oncology, as well as a combined fellowship and doctoral degree program in collaboration with Emory University School of Medicine and Georgia Institute of Technology. This particular program provides a unique pathway for pediatric hematology/oncology fellows to pursue a PhD degree during the research portion of their fellowship.

**With limited federal funding available for training programs like these, we rely on donor support to educate and inform the medical innovators and leaders of tomorrow.**





### Precision medicine

Precision medicine uses genomic testing to pinpoint the unique genetic makeup of a child's cancer and identify vulnerabilities within a tumor. This allows physicians to create a treatment that is more targeted and less toxic. For children with high-risk tumors, those who have relapsed or refractory cancer, this personalized approach to treatment may be their best hope for survival.

Precision medicine is still in its infancy, yet the Aflac Cancer and Blood Disorders Center has the building blocks in place to allow researchers, technologists and doctors to work hand-in-hand to make tailored cancer treatments a reality. These building blocks include: a diverse and high-volume patient population, which makes for stronger science and more sound studies; state-of-the-art technology, including those tools needed to understand the genetic markers of both individual patients and their cancers; as well as a growing network of top minds across the nation who are committed to coming together to find innovative treatments and possible cures.

**To advance our research and ensure more patients have access to this novel approach to treatment, we need donor support to fund the rapid expansion of this new program.**

### Cancer genetics and cancer predisposition

Traits like blue eyes, curly hair and dimples can be passed down through generations. But we now know that cancer, too, can be in our genes. In fact, approximately 10 percent of all childhood cancers are caused by a cancer predisposition syndrome. This is why we provide genetic and genomic testing to determine a child's risk for an inherited cancer. We provide genetic counseling to help families understand the implications of their child's genetic test results. And we offer and design individualized programs for patients with a predisposition syndrome to monitor for early signs of cancer and help reduce their risk of cancer. On a broader scale, our database of genetic sequencing information gives researchers access to data from an entire population of patients, which helps inform studies about cancer predisposition and drive new approaches to treatment.

**Without insurance reimbursement in all cases, it is support from our donors that allows us to continue to utilize genetic testing to help families do all they can to stay one step ahead of cancer.**







### Cell and gene therapy

Cell and gene therapy is the next frontier in treating and, ultimately, curing children with cancer and blood disorders. Some of these recent discoveries include the use of cells to assist with decreasing graft-versus-host disease (GVHD) in BMT patients following their procedure. Another form of cellular therapy, chimeric antigen receptor (CAR) T, is used to engage the patient's own immune system to attack and kill cancer cells, including brain cancer, neuroblastoma and T cell leukemia.

**With support from our donors, we can continue our efforts to bring next-generation treatments like these to the patients who need them most.**



### Clinical research

The Aflac Cancer and Blood Disorders Center is committed to excellence and innovation in pediatric cancer and blood disorders research. We believe that clinical trials are our best hope for finding a cure. That's why we have established a robust Clinical Research Program with the infrastructure necessary to enroll thousands of patients in clinical trials.

We currently have **400** trials open for enrollment, and more than **1,300** patients taking part in clinical studies. This puts us in the top 2 percent nationally for enrollment in therapeutic clinical trials within the Children's Oncology Group (COG). We are also one of only **21** premier pediatric oncology programs in the COG Phase I and Pilot Consortium, offering children with relapsed and refractory cancer access to new therapies.

In addition to operating trials through the COG and other national clinical research consortia, we offer innovative treatment protocols developed by investigators at the Aflac Cancer and Blood Disorders Center. Our researchers are uniquely positioned to leverage the vast knowledge and capabilities in our home city of Atlanta through collaborative relationships with Emory University School of Medicine, Emory Winship Cancer Institute, Georgia Institute of Technology, Morehouse University School of Medicine and the Centers for Disease Control and Prevention (CDC). Working together, we continue to seek cures for the most challenging childhood oncologic and hematologic conditions.

**With a limited amount of federal funding available for childhood cancer and blood disorders research, donor support is vital to our mission to push for greater advances in the fight against these complex conditions.**





### Sickle Cell Disease Program

The Aflac Cancer and Blood Disorders Center offers the largest comprehensive pediatric sickle cell disease program in the country, serving more than **1,900** children impacted by this disease. Sickle cell disease is the most common inherited blood disorder and can cause severe health complications such as pain crises, strokes, slowed growth, impaired fertility, frequent hospitalizations and ER visits, and even early death.

To help children and families manage this chronic condition appropriately, with as little disruption as possible within their day-to-day lives, our Sickle Cell Disease Program offers comprehensive disease management clinics, as well as transfusion services, specialty clinics and inpatient care. We also offer a transition program for our adolescent and young adult patients to ensure a smooth transition into adult care.

We offer the most advanced treatments and services available for sickle cell disease, including transcranial Doppler (TCD) screening to evaluate patients for stroke risk and BMT for eligible candidates. In fact, we are a national leader in BMT transplant, which we now know can cure select patients with sickle cell disease.

In addition, as a National Institutes of Health-funded Excellence in Hemoglobinopathies Award recipient, we're recognized for our commitment to developing new treatments for sickle cell disease. We work with experts and treatment centers nationwide to conduct clinical research studies focused not only on curing more patients with this disease, but also improving the quality of life and reducing complications for children affected.

**To continue our efforts to identify viable treatment options that can provide kids relief from this painful disease, donor funding is critical.**

### Sickle Cell Disease Chronic Pain Program

Sickle cell disease is a lifelong illness that can cause extreme pain. This chronic pain interferes significantly with family function, social development, school attendance, academic performance and advancement, and is associated with high rates of depression, anxiety and low self-esteem. At the Aflac Cancer and Blood Disorders Center, we are developing a multidisciplinary program focused on the prevention and treatment of chronic pain in patients with sickle cell disease. The program will use a multifaceted approach, including multiple medications, intensive psychological therapies, physical therapy, child life and other supportive services provided through regularly scheduled outpatient visits, as well as frequent phone and electronic contact with patients and families between visits. Unique, individualized pain management plans will be developed for each patient with careful attention to ensuring consistency of care during emergency room visits and hospitalizations. Research activities will focus on identifying risk factors for the cause of chronic pain and developing and testing novel strategies to better prevent and treat the pain.

**With donor support, we can help more children with sickle cell disease live a normal life, free of pain and full of possibilities.**







1  
2  
3  
4  
5  
6  
7  
8  
9  
0

## Setting our sights on tomorrow

Though progress has been made, we cannot rest until we cure all children with cancer and blood disorders. That's why our vision for tomorrow is bold. It is ambitious. But we're hopeful it can be achieved with your help.

We need philanthropic support now more than ever so that we can continue charting a course that advances both our research and clinical capabilities—that allows us to treat *and* innovate. Fueled by the generosity of friends like you, we can continue providing kids the most advanced therapies available, and we can offer comprehensive care that is specially tailored to meet the needs of kids and their families.

There are many opportunities to support our mission and invest in the work being done here. Talk with a gift officer to learn how you can make a difference in the life of a child fighting cancer or a blood disorder.





