

Cincinnati Children's, one of the oldest pediatric health systems in the United States, was established in 1883 by three compassionate women who converted a three-bedroom house in Walnut Hills into a small hospital for children. Over the years, Cincinnati Children's has become a world leader in pediatric healthcare research and education.

**Our Vision** is to be *the* leader in improving child health.

Our Mission is to improve child health and transform delivery of care through fully integrated, globally recognized research, education and innovation.

For patients from our community, the nation and the world, the care we provide will achieve the best:

- Medical and quality-of-life outcomes
- Patient and family experience
- Value

today and in the future.

#### Dear Friends,

At Cincinnati Children's, we pride ourselves on being "the best at getting better."

Society's most vulnerable members—our children—rely on us to see them, to care for them and to help each one of them live their best possible life. And we know that we do that best when we welcome everyone—patients, families and employees alike—and when our workforce represents the populations we serve.

This year's Community Impact Report highlights our strong commitment to child health supported by excellence in clinical practice, research and training. It summarizes how pediatric care and research are evolving and improving to meet patient and community needs, such as by integrating artificial intelligence to address pediatric chronic conditions and applying virtual reality to train medical providers in safety protocols. And the Bridge Clinic connects patients to mental health care while reducing emergency department visits.

While our work evolves, our core values—Respect Everyone, Tell the Truth, Work as a Team and Make a Difference—have not changed. We will continue to provide world-class care to children where they live, both in our local communities and beyond. We will innovate through research and discovery, and by developing solutions to the most complex and challenging physical and mental health challenges. And we'll continue to provide the best education for the next generation of pediatric health leaders and providers.

Importantly, we continue to educate government and community leaders about the determinants that shape child health and healthcare for everyone.

As we look to the future, we reaffirm our promise to our patients and families, our team members, and the communities that count on us: We are, and will continue to be, the best at getting better as we work toward our goal of ensuring that everyone feels welcome, safe, valued and respected at Cincinnati Children's.



#### Above:

"Inside Cells, Inside Us" is a series of fanciful, colorful mosaics that represent the cellular structures that unite us as one global family. The artwork, which is displayed in Location T at Cincinnati Children's Burnet Campus, was a collaboration between the health system, Kolar Design, the Art Academy of Cincinnati Community Education Department and artist Beth Himsworth. During workshops with Beth, Cincinnati Children's staff and researchers depicted cellular structures using tissue paper and modeling clay.



Steve Davis, MD, MMM President and Chief Executive Officer



Liza Smitherman Chair, Board of Trustees

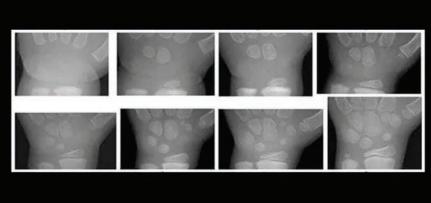


## Pursuing Our Potential Together

Cincinnati Children's launched Pursuing Our Potential Together (POPT) to accelerate our work in the areas of Care, Community, Cure and Culture by 2033, when the health system will celebrate its 150th birthday. By advancing efforts in these areas, Cincinnati Children's will improve child health so all kids can pursue their potential.







Top: Cardiologists and cardiothoracic surgeons are exploring how to use AI to predict the course of a patient's hospital stay and adjust when changes arise.

Above: More than 40,000 pediatric hand radiographs have been used to develop modern AI systems to improve bone age assessments.

## Transforming Pediatric Healthcare and Systems Using Al

Cincinnati Children's is transforming pediatric healthcare by using artificial intelligence (AI) to address a range of health challenges—from early disease detection to disease progression tracking and personalized treatment planning—while integrating expertise from multiple departments and divisions.

Our Al-powered imaging solutions improve diagnostic accuracy, support early interventions and help in developing personalized treatments:

- More than 40,000 pediatric hand radiographs have been used to develop modern AI systems to improve bone age assessments.
- An Al algorithm automatically identifies and locates lines, drains and airways in pediatric chest radiographs.
- Organ segmentation models have been automated in pediatric CT and MRI scans for organs like the liver, spleen, pancreas and heart, lungs and airways.

We are developing one of the largest repositories of clinical pediatric imaging data and associated clinical data such as laboratory results.

"Imaged-based AI has been leveraged across specialties to enhance decision-making and interpretation of pediatric histology, echocardiography and renal ultrasound. In addition, this technology is enabling live guidance of video-based intubation in pediatric patients beyond specialist centers," says Lauren Erdman, PhD, faculty in the Department of Pediatrics and the James M. Anderson Center for Health Systems Excellence.

In addition, cardiologists and cardiothoracic surgeons are exploring how to use Al to enchance Flight Plans, visual representations of a patient's surgical journey using a patient's clinical data, to predict the course of a patient's hospital stay and adjust when changes arise.

See page 12 to learn how another technology, virtual reality, is being used to train providers and patients on firearm safety.

### Care: Patient Care Impact

As one of the nation's largest pediatric health systems, we are reimagining care because we believe all children should have access to high-quality treatment. As we continue to grow to accommodate the needs of our region, we are evolving our approach to delivering patient services. This includes how we personalize treatment and bring the most appropriate care to our patients, meeting them where they are. We are pushing ourselves to develop a concept of care that can be scaled, delivers the best outcomes, increases affordability and convenience, and extends our reach.



Above: Mollie gets a check-up with Dr. Krista Allen, lead physician at Cincinnati Children's Loveland Primary Care.

#### Patient Care Impact FY24\*



Mental Health Visits, Admissions, **ED Consults and Consultations** 



103,296

Telehealth Visits



34,447

Admissions (includes short stay)



169,634

**Emergency and Urgent Care Visits** 



1,503,643

**Outpatient Visits** 



**Total Patient Encounters** 

\*July 1, 2023, to June 30, 2024



**Above:** Non-suicidal patients can be redirected to the outpatient Bridge Clinic for immediate assessment, intervention and short-term follow-up.

## Bridge Clinic: Closing Mental Health Gaps for Children and Youth

Cincinnati Children's providers see firsthand the mental health challenges that children and youth experience. The Bridge Clinic was established in 2017 as part of Cincinnati Children's Psychiatric Intake Response Center (PIRC) to increase access to mental and behavioral health care for all children. Each year, more than 8,000 patients in crisis are assessed and triaged through PIRC. Patients who are not acutely suicidal are redirected from the Emergency Department to the outpatient Bridge Clinic, which provides immediate assessment, intervention and short-term follow-up.

The Bridge Clinic may be appropriate for referral or services if:

- Patients are in need or are having a non-suicidal crisis.
- Patients do not have an existing provider, and they need behavioral health treatment.

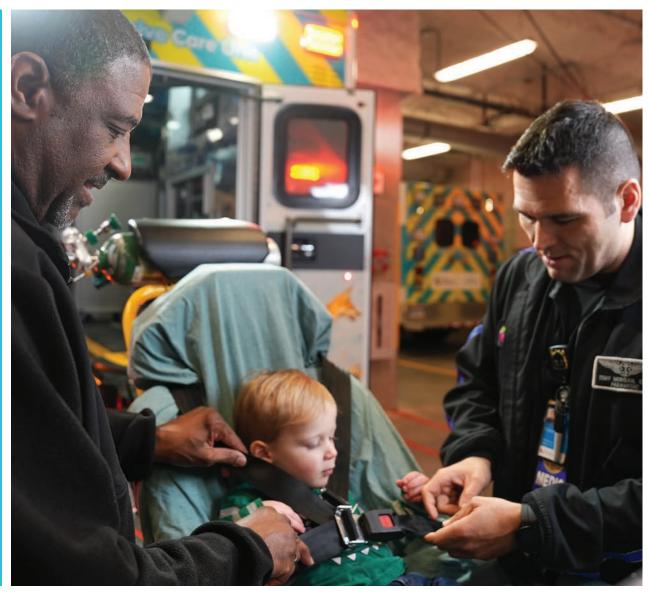
If a child or patient is suicidal, they will not be referred to the Bridge Clinic. A parent or caregiver should call 911 or visit the nearest emergency room.

Laurel K. Leslie, MD, MPH, director of Cincinnati Children's Mental and Behavioral Health Institute, states that the Bridge Clinic is "one way that we increase access in the region, while providing the right care to the right child at the right time. The goal is to direct children and youth to needed services. One may need a full-length hospital stay right now, while another can promptly benefit from outpatient treatment or our expanded partial hospitalization programs, which provide services to children and youth while they live at home."

Cincinnati Children's is the largest provider of pediatric mental health services of any pediatric health system in the country, with 123 inpatient and residential psychiatric beds.

Parents, caregivers or providers can email psychiatryresponse@cchmc.org or call 513-636-4124 with questions about referring a patient, inpatient care, outpatient care or community services.

## Our Wildly Important Goal: Improving Access to Care

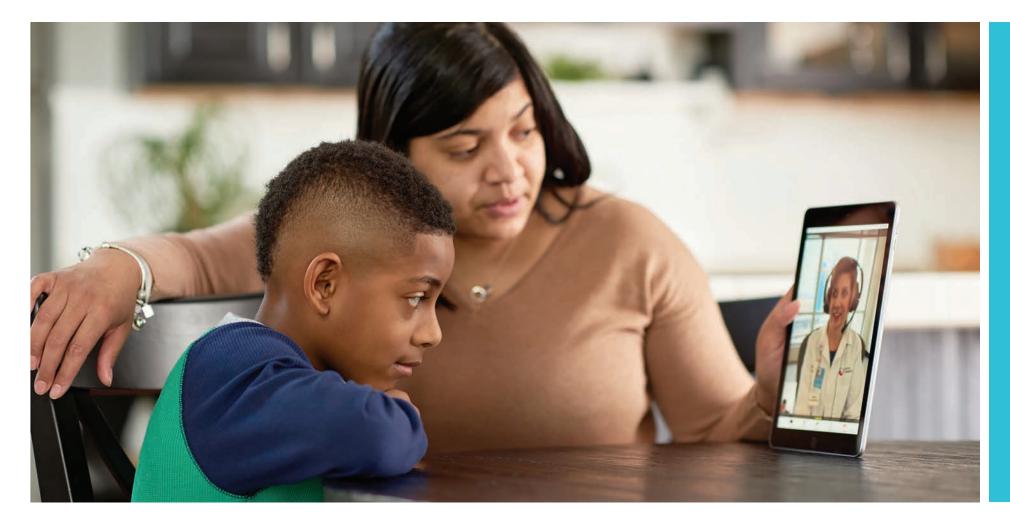


Above: The Critical Care Transport team reduced the time from when it receives a call to when it leaves to get a patient from 63 to 30 minutes.

Right: The CincyKids Health Connect app and website offer on-demand video visits for minor injuries and illnesses.

Cincinnati Children's is focused on improving access to care. We call it our Wildly Important Goal, a term that comes from Sean Covey, Chris McChesney and Jim Huling's book, The 4 Disciplines of Execution. We work to ensure that our care is timely, convenient, easy to navigate, appropriate and available to patients of all backgrounds. Among the initiatives across the health system:

- Outpatient video visits improve access and experience. "The telehealth visit is very convenient for follow-up visits," said one parent. "We live three hours away, and it saves us time and money. It helps keep our child from missing out on her educational opportunities for the entire day."
- The CincyKids Health Connect app and website offer on-demand video visits 24 hours a day, seven days a week for minor injuries and illnesses. It's a great option when families can't get an appointment with their child's primary care physician. The virtual urgent care service has been praised by families: "The experience was not only efficient but also precisely what my child needed at the right time. ... I truly appreciate the convenience of being able to receive such high-quality attention virtually."



- The Critical Care Transport team reduced the time from when it receives a call to when it leaves to get a patient from 63 to 30 minutes. Each team is always assigned to the same vehicle, they are prepared for calls 30 minutes into their shifts, and they collaborate with patient flow and transport coordinators.
- The Complex Care Dental Clinic allows medically complex patients to receive their medical and dental care in just one visit. Before the clinic opened, it could take several months of appointments to meet all these patients' needs. Now, care is more timely and the overall number of hospital visits has been reduced.

We will continue to improve access using data analytics, realtime information and communication tools to optimize patient care and staff workflows. Our approach to increasing access is comprehensive and critical to achieving our vision to be the leader in improving child health.

## Community: Community Investment Impact

In support of our mission, we strive to reach outside our walls to improve outcomes for all children in the region. We are deeply committed to collaborating with communities to improve health regardless of a child's background or circumstance. We do this by connecting and building trust with schools, community organizations, health partners and other stakeholders throughout the region. Our employees engage with the community through initiatives such as the Volunteer Ambassador program. Cincinnati Children's robust community engagement efforts support our mission and create a healthier place for children to grow and thrive.



Above: HealthVine employees engage with kids at the Adams County Health Fair.

#### **Community Impact FY24\***



Community Outreach Events



1,713

Cincinnati Children's Employee Volunteers Engaged



\$1,213,074

Donations to Employee Giving Campaigns



158,887

Children and Families Reached through Community Outreach



7,520

Workforce Development -Community Engagement



3,755

Donors Involved in **Employee Giving** 

\*July 1, 2023, to June 30, 2024





Top: (From left) Lisa Mauthe and Kristina Johnson of Cincinnati Works partner with Tony Spitznagel, senior quality improvement specialist, on their project for ImpactU. Above: (From left) Rachel Uhriq, quality improvement specialist, and Jenny Oehler, senior clinical quality specialist, collaborate with Danyette Foulks-Young of Cincinnati Works.

## ImpactU Collaborates with Nonprofits to Support Child Health and Communities

Cincinnati Children's partners with community organizations to ensure children and families thrive. One way we do this is through ImpactU, a six-month course for social service, school, government and healthcare leaders. Participants design, test and implement quality improvement within their organizations with the support of a Cincinnati Children's coach.

ImpactU is a collaboration between the Michael Fisher Child Health Equity Center and the James M. Anderson Center for Health Systems Excellence's Leadership Academy. More than 180 leaders from 46 organizations such as Beech Acres Parenting Center, the Cincinnati Health Department and Cincinnati Public Schools have participated since 2016.

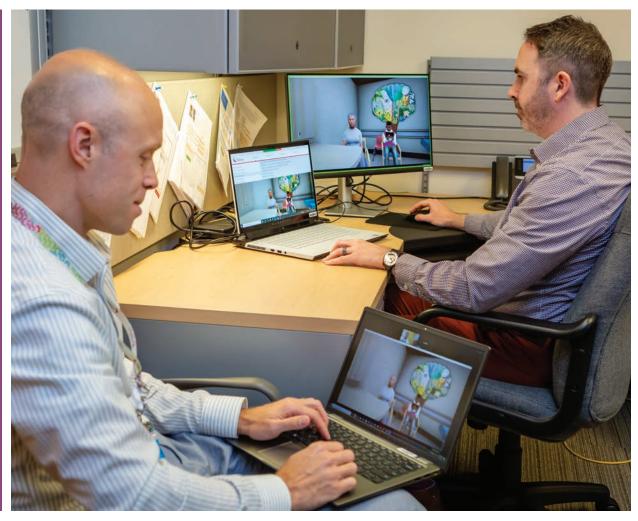
Cincinnati Works, an organization that helps families escape poverty through financial coaching and support, participated in ImpactU. Only 60% of its members were attending one-on-one financial coaching appointments, held during the workday.

Through ImpactU, Cincinnati Works developed a five-session, small-group boot camp to cover budgeting, saving and long-term financial planning. The sessions were held after work hours and at public libraries for the convenience of members. By increasing engagement through the boot camp, attendance at the coaching appointments improved.

Each ImpactU cohort includes about 17 leaders, each critical in their own way for Cincinnati Children's to achieve its vision of moving beyond health care to health for all children.

"No one organization can address all the challenges in Cincinnati, but together in a network we can work together to solve important issues that affect children and families," says Chris Alexander, lead quality improvement specialist in the Anderson Center.

# Virtual Reality Training Helps Physicians Discuss Firearm Safety with Caregivers



Above: Dr. Matt Zackoff (foreground) observes what a physician taking the training would see while Dr. Joe Real serves as the facilitator.

Right: The screen for facilitators includes the patient avatars and the verbal prompts used in the exercise. The virtual reality software was developed by Cincinnati Children's Digital Experience Technologies team.

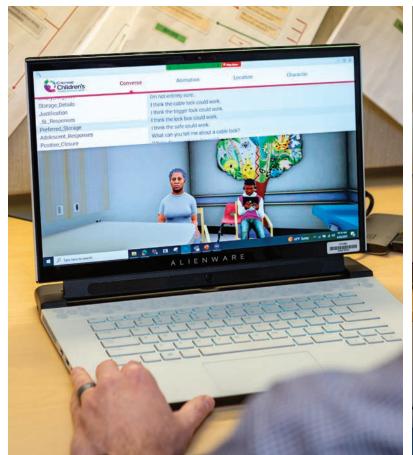
Far Right: Dr. Real and Dr. Zackoff co-lead digital simulation in Cincinnati Children's Center for Simulation and Research.

Firearm-related injuries are the leading cause of death in children in the United States. During well-child visits, pediatricians are urged to counsel about secure storage of firearms as Greater Cincinnati communities are affected by firearm injury.

Joe Real, MD, MEd, and Matt Zackoff, MD, MEd, who co-lead digital simulation in Cincinnati Children's Center for Simulation and Research, developed a virtual reality training program to build physicians' confidence in talking about firearm safety practices.

"Pediatricians have long said our role is to keep kids safe, talking about bike helmets, pool safety, car seats," Dr. Zackoff says. "Now we can counsel patients and families on what poses the highest risk for death for kids: firearms."

During the 40-minute training, a learner and facilitator log on to a video call, where a physician's office is shown with an avatar of a caregiver. Learners progress through four increasingly challenging cases, during which they practice speaking about secure firearm storage. If they do well, the avatar will respond positively. Facilitators offer feedback about how to make the conversation more effective and review secure storage devices such as cable locks, lock boxes and firearm safes.





"If learners didn't like how their words landed, they can try a different way in the virtual reality environment before they meet with a real family," Dr. Real says. "By the end of the training, they know what they want to say and how they want to say it, increasing their confidence in discussing firearm safety with parents in practice."

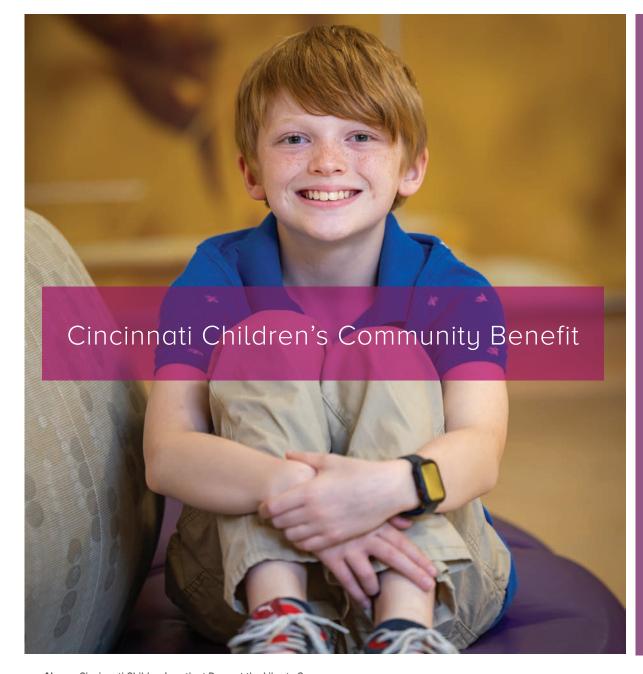
Jessica Trygier, MD, a general pediatrician, has taken the training and says caregivers appreciate the guidance about secure storage practices to keep their children safe.

"The techniques in the training help facilitate a conversation, rather than just providing a huge amount of information that could be overwhelming," Dr. Trygier says.

To develop the simulation's messaging, the team sought input from community groups such as the West End Community Research Advisory Board and Moms Demand Action.

"That co-creation really helped develop a product that was acceptable to families in Cincinnati," Dr. Real says. "We've worked with rural, suburban and urban groups, really trying to make this conversation appropriate and acceptable to all those community members."

The program is one of several efforts underway through Cincinnati Children's Firearm-Related Injury Task Force, which is working with the City of Cincinnati and UC Health to build the first joint pediatric and adult hospital-based violence intervention program.



### What is Community Benefit?

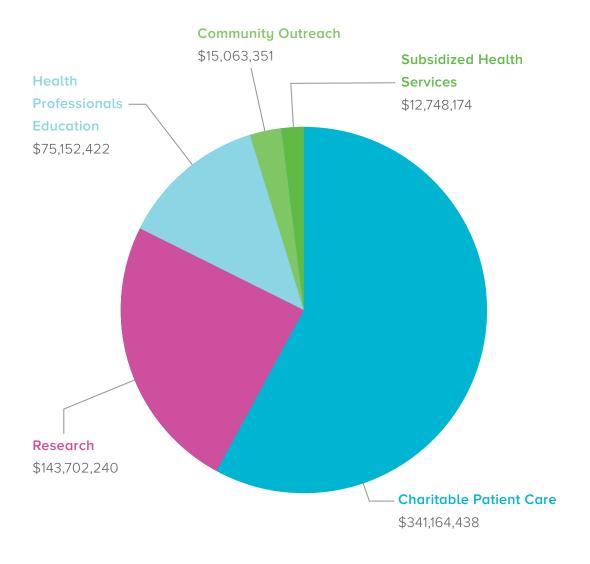
Community benefit encompasses programs or activities that provide treatment and/or promote health in response to needs identified by community residents. Cincinnati Children's is deeply committed to providing community benefit, including services that are discounted or subsidized by organizational or other funding sources.

We demonstrate our commitment to children and families in Greater Cincinnati and the surrounding region by investing significant resources in programs and services that meet these community benefit

- Enhance the health of the community
- Advance medical or healthcare
- Lessen the burden on government or community efforts

Above: Cincinnati Children's patient Dean at the Liberty Campus.

# Cincinnati Children's delivered \$587.8 million in community benefit services in fiscal year 2023.\*



### Types of Benefit



#### **Charitable Patient Care**

Free or discounted services for those unable to pay and to bridge Medicaid shortfall.



#### Research

Laboratory science and applied research costs that are supported by internal or eligible grant funding.



#### **Health Professionals Education**

Cost of providing education to prospective physicians and healthcare professionals, less federal support of our graduate medical education program.



#### **Community Outreach**

Programs that provide services or support directly to the community or to nonprofit organizations with similar missions of service, including health education, injury prevention and wellness initiatives.



#### **Subsidized Health Services**

Clinical services operated at a financial loss, including mental health and primary care.

Total: \$587,830,625

## **Cure:** Innovative Research Impact

Since the Cincinnati Children's Research Foundation (CCRF) opened in 1931, our researchers have made life-saving discoveries, including the first practical heart-lung machine and artificial surfactant. Today, CCRF is one of the top recipients of pediatric research grants from the National Institutes of Health. Our work encompasses basic, translational, clinical and quality outcomes research aimed at improving child health. We apply the most advanced research techniques to discover new ways to prevent and treat pediatric diseases. Learn more about the history of breakthroughs and discoveries at cincinnatichildrens.org/ breakthroughs.



Above: Lab technologist Tammy Ward performs a test in the Cancer and Blood Diseases Institute's Erythrocyte Diagnostic Laboratory.

#### **Research Statistics FY24\***





Philanthropic Support

(Research)



Research Divisions and Institutes



**External Funding** 

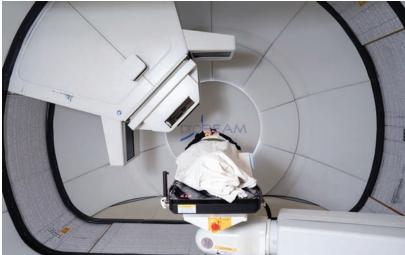


**Total Publications** 

#3 among all children's hospitals for National Institutes of Health (NIH) funding

\*July 1, 2023, to June 30, 2024





**Top:** Atticus traveled from his home in Nashville, TN, to receive treatment for medulloblastoma at our Proton Therapy Center.

**Above:** A patient receives proton therapy treatment at the Proton Therapy Center at Cincinnati Children's Liberty Campus.

## Delivering the Best Cancer Care to Children Locally and Around the World

Cincinnati Children's is an international leader in caring for children and young adults with cancer. Families come from around the world for our advanced technologies and expertise in treating and curing the hardest, most resistant cancers. Our patients, parents, physicians and researchers are close partners. This completely integrated approach to care and scientific discovery enables us to drive breakthroughs in medicine, develop new treatments and manage the most challenging patient diagnoses.

Some patients receive care through our Proton Therapy Center, which provides the most advanced form of radiation therapy available. A technique called "pencil beam proton therapy" destroys cancer while minimizing damage to surrounding healthy tissues and organs. As a result, patients experience fewer short-term side effects and long-term complications than they would with traditional radiation therapy.

Trent Hummel, MD, a pediatric neuro-oncologist at Cincinnati Children's, explains that "this improved outcome is especially important for children, whose bodies are still growing and developing, as we can avoid exposing critical tissues and organs to radiation and specifically target the tumor."

Cincinnati Children's was one of the first pediatric hospitals in the world to launch a pediatric proton therapy center. We've treated more than 1,600 patients since opening our center in 2016, including Atticus, who was diagnosed with medulloblastoma, a form of brain cancer. His family traveled from Nashville, TN, to Cincinnati so he could receive treatment at our Proton Therapy Center. The specialized treatment provided the much-needed hope that the family had not previously considered possible.

Cincinnati Children's provides excellent care to every patient, but the most important thing we offer is hope. Together, our expertise and approach give hope and healing to children, families and caregivers when they need it most.

## Culture: Employee and Workplace Impact

Cincinnati Children's is the region's largest employer with more than 19,500 team members, including more than 5,000 nurses and 1,914 active medical staff. Through a culture of teamwork, our employees are committed to caring for patients and their families, advancing science and discovery, and working together toward a common goal: to improve the lives and health of children. Cincinnati Children's has been recognized nationally for our healthcare leadership and for our efforts to provide a strong and welcoming organizational culture.



#### Awards & Recognition



Named one of the 10 Best Children's Hospitals in the **nation** in the 2024-2025 rankings published by *U.S. News* & World Report. Cincinnati Children's was ranked in the top 10 of each of the 10 specialty areas, including No. 1 rankings in cancer care, gastroenterology & GI surgery, and pulmonary & lung surgery.

ranked No. 46 among the Best Employers for New Grads, placing among

Of the more than 500 companies assessed by the National Organization on Disability, Cincinnati Children's was among 59 to be named a Leading Disability Employer.

Cincinnati Children's is **No. 71** on Forbes' annual list of America's Best Large Employers for 2024.

Recognized as one of 60 hospitals and health systems with great psychiatry and behavioral health programs in 2024 by Becker's Hospital Review.



**Top:** Carrie Martin is a nurse practitioner in the Transitional Care Center and the clinical manager for advance practice providers for Pulmonary Medicine. Bottom: Kimbaird Avant is an accreditation and regulatory consultant in the James M. Anderson Center for Health Systems Excellence.

## Programs Support Employee Growth and Advancement to New Roles

Cincinnati Children's strives to support a culture of talent, professional development and excellence in health care delivery.

Carrie Martin arrived at Cincinnati Children's in 2005 as a medical assistant. She took temperatures, measured blood pressure and gave vaccines.

"I knew there would be opportunity here, but I didn't know what that looked like exactly," Carrie says.

Carrie applied for a program that allowed her to earn an associate degree in nursing. Using the tuition reimbursement benefit, she then earned bachelor's and master's degrees in nursing and eventually a Doctor of Nursing Practice degree in 2019. Through opportunities and support, today Carrie is a nurse practitioner in the Transitional Care Center and the clinical manager for advance practice providers for Pulmonary Medicine, managing about 30 people.

"The assistance and quidance that I received are why I am where I am today," Carrie says.

Kimbaird Avant, an accreditation and regulatory consultant in the James M. Anderson Center for Health Systems Excellence, shares a similar story. Kimbaird started by delivering food trays to patient floors, moved on to sterilizing surgical instruments and later joined the information services team.

Along the way Kimbaird built relationships, including through Cincinnati Children's mentoring program, which helped him decide to pursue a computer technology degree. Kimbaird worked full time and attended school part time to earn a bachelor's degree in management and a master's in executive leadership and organizational change.

"Cincinnati Children's opens doors for people with talent and aspirations to grow their careers," Kimbaird says. "I was able to look at educational and employment opportunities that I probably would never have considered if I hadn't come here."





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