



MD Anderson Children's Cancer Hospital FY22 Year in Review

Cade, Parker and Caleb stop to smile at Camp Star Trails. This donor-supported event gives patients and siblings the chance to experience traditional summer camp activities in a safe environment.

Letter from division leaders



Richard Gorlick, M.D.
Division Head



Lisa Hafemeister, M.H.A., F.A.C.H.E.
Executive Director and
Division Administrator

As we reflect on Fiscal Year 2022 — especially what we did to best serve our young patients — we have so much to be proud of at The University of Texas MD Anderson Children's Cancer Hospital.

Our accomplishments in the clinic, in research labs, in education settings and in the larger community are a direct result of the expertise, compassion and hard work of our faculty and staff. This FY22 Year in Review highlights the work of these extraordinary professionals who dedicate their lives to Making Cancer History® on behalf of children, adolescents, young adults and families who are facing cancer. The development of new treatment standards, expansion of our best-in-practice support programs and training the next generation of cancer fighters will help move the pediatric oncology field forward to help save and improve lives.

Much of our success is possible because of donors who generously support MD Anderson's mission to end cancer. Philanthropy plays a critical role in helping to accelerate research plans, bringing new services to patients, and ensuring that our staff has the resources needed to make patients comfortable and set along a path to a healthier future. Thank you to everyone who gave to our pediatric programs this past fiscal year. You are making an important difference.

We are pleased that this Year in Review features the faces and stories of our amazing patients, who inspire us daily with their courage and creativity. Their perspectives reinforce the idea that each and every patient is unique. MD Anderson Children's Cancer Hospital strives to meet their diverse needs while providing the best that cancer medicine has to offer. Now, we look toward the future with optimism, knowing that our efforts will lead to better ways to care for so many.

Sincerely,

Richard Gorlick, M.D.
Division Head

Lisa Hafemeister, M.H.A., F.A.C.H.E.
Executive Director and Division Administrator

Pediatrics by the numbers

MD Anderson Children's Cancer Hospital offers young patients a personalized setting that caters to the unique needs of children, adolescents and young adults. This is while they still have access to the resources of a major, comprehensive cancer center. Here's a breakdown of some stats from FY22.



TEXAS
1,850
PATIENTS

U.S., OUTSIDE OF TEXAS
393
PATIENTS

INTERNATIONAL
69
PATIENTS

410
NEW PATIENTS



2,543
TOTAL TELEHEALTH VISITS
VIDEO VISITS 2,183
PHONE VISITS 360

1,534
CONSULT VISITS



11,996
FOLLOW-UP VISITS

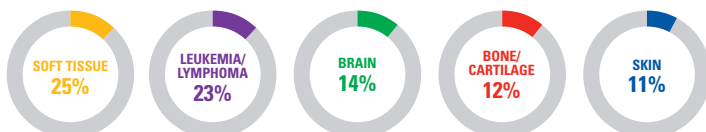


8,521
INPATIENT DAYS



\$5,368,337
TOTAL RESEARCH GRANT DOLLARS
FEDERAL \$2,584,385
PRIVATE INDUSTRY \$439,699
CPRIT \$1,667,750
FOUNDATION \$676,503

TOP 5 NEOPLASMS





Pediatric Acute Cancer Care Center offers 24/7 care

As of February 22, 2022, pediatric hematology and oncology patients needing urgent care can visit the Pediatric Acute Cancer Care Center. Specifically designed for children, adolescents and young adults, the Pediatric Acute Cancer Care Center is open 24 hours a day, 7 days a week. Our pediatric advanced practice providers, pediatric oncologists and nocturnalists treat patients who have fever, pain, nausea, vomiting and many other conditions requiring urgent attention. Previously, pediatric patients had to visit MD Anderson's adult Acute Cancer Care Center, which can be intimidating. Patients also no longer have to wait for normal business hours to receive urgent care in a pediatric setting. "With the opening of the Center, pediatric patients are being admitted and treated in a more expedited manner. Our patients and their families are very satisfied," says Janet Smith, R.N., M.S.N., C.P.O.N., associate director of Clinical Nursing. Jennifer Rea, R.N., B.S.N., C.P.O.N., is the Pediatric Acute Cancer Care Center nurse manager.

League City location adds pediatric outpatient clinic

MD Anderson League City provided laboratory testing and diagnostic imaging services to nearly 20 pediatric patients in FY22. This was the first time MD Anderson Children's Cancer Hospital operated at a Houston-area location. With the addition of a pediatric outpatient clinic, MD Anderson providers were able to see patients 8 years and older twice a month. Patients and families in League City appreciate the convenience of obtaining labs, X-rays, ultrasounds and follow-up provider visits close to home.



Mazen Nadim is able to spend quality time with his horse after a collaborative and innovative robotic surgery, the first of its kind for a pediatric patient at MD Anderson.

OneMDAnderson approach employs robotic surgery to help a patient get back to the things he loves

Mazen Nadim will always remember 2022 as the year his parents flew him around the world in search of treatment options for an adrenal gland tumor. This small gland near the kidney produces hormones that help regulate heart rate, blood pressure and other functions. His local doctors in Cairo, Egypt, found the tumor on chest and abdominal CT scans they ordered to help investigate what was causing the teen's chest pain and fatigue nearly a year after he'd contracted COVID-19.

Mazen's distressed parents sought expertise in Europe and then in the United States. Finally, in February 2022, the family came to MD Anderson and met with Douglas Harrison, M.D., M.S., associate professor of Pediatrics and center medical director for MD Anderson Children's Cancer Hospital. He examined the 15-year-old and ordered further workup. Good news — the tumor was benign.

More good news came from pediatric surgeon Mary Austin, M.D., M.P.H., F.A.C.S., associate professor of Surgical Oncology, and her colleague, Naruhiko Ikoma, M.D., assistant professor of Surgical Oncology, who performs 90% of his operations on adults using a robot. The family learned elsewhere that open

surgery with a large incision would be the only choice for such a young patient, but the MD Anderson specialists — who were already considering offering robotic procedures to pediatric patients — said Mazen would be a good first candidate. As OneMDAnderson, they worked together to successfully perform the highly specialized adrenalectomy. On the way into the operating room, a child life specialist worked with Mazen to reduce his anxiety about becoming the first to receive this history-making surgery. Following a two-night inpatient stay, Mazen was discharged. Today, he is doing very well and has returned to school, sports and his love of horses.

Innovative research improves patient outcomes: Partnering across the institution to expand clinical trial access

The Pediatrics Division has more than 100 active studies available to young patients. The portfolio includes Children's Oncology Group studies, investigator-initiated trials informed by research in Pediatrics laboratories, industry-sponsored studies and studies derived through the division's collaboration with adult oncology departments at MD Anderson. Faculty throughout the institution have worked with Pediatrics to reduce the age criteria for patient enrollment in many of these trials. One example is a menin inhibitor trial (2019-0997) for a subset of aggressive leukemias that typically have poor outcomes. This trial of the oral agent, SNDX-5613, began in the Leukemia Department but now includes Branko Cuglievan, M.D., assistant professor of Pediatrics, as a collaborator, who has enrolled approximately 20 patients into the trial. Another example is a trial evaluating a universal chimeric antigen receptor T cell product (UCART) to target the CD22 surface molecule in refractory/relapsed B-cell acute lymphoblastic leukemia (2017-1003). One of seven patients enrolled in this trial as of Aug. 31, 2022, is receiving care in Pediatrics. Kris Mahadeo, M.D., M.P.H., associate professor of Pediatrics, is the trial collaborator.

Donor funds support preclinical work in the lab, such as tissue sample acquisition and the study of new drug candidates. Contributions are used in the clinical trials arena to fund the salary of staff who manage patients and offset costs not covered by insurance or industry sponsors, especially for innovative, investigator-initiated clinical trials that are testing novel combination therapies trying to augment our current treatment paradigms.

These are just a few accomplishments led by our faculty. To meet our entire team, use your smartphone camera and the QR code.





A patient experience that is 'rare' elsewhere

When Q'Mariyon "Nasean" Ward was diagnosed with renal medullary carcinoma at the age of 6, his mother, Chelsey, knew exactly where to take him: MD Anderson Children's Cancer Hospital.

"I'm a pediatric oncology nurse," she says. "Even for me, it was a lot to take in. We had never treated this type of cancer at the hospital where I worked."

Renal medullary carcinoma is an exceptionally rare and aggressive cancer. Nasean is the youngest patient to ever be treated for the disease at MD Anderson. In 2020, his family left their home in North Carolina and moved to Houston. After extensive surgery and chemotherapy, Nasean has since been in remission, defying the survival odds associated with this type of cancer. He is currently under the expert care of Najat Daw, M.D., professor of Pediatrics, and thriving.

Both for pediatric and adult cases, MD Anderson has a reputation for successfully treating forms of cancer rarely seen at other health care institutions. MD Anderson's investment in rare cancer research, advanced greatly by the generosity of donors, helps offer clinical answers that might not be available elsewhere.

"Our family came to MD Anderson so that Nasean could get the care he needs and deserves," Chelsey shares. "What we found was so much more — a community of people who are interested in who he is as a person. Nasean is energetic and loving. He wants to make sure everyone is happy and taken care of around him, even as they are busy caring for him."

In addition to receiving care at MD Anderson, Nasean also participated in many support programs and special events, like Camp Star Trails, Camp H-Town, Arts in Medicine, the Back-to-School Fashion Show and the Houston Dynamo Dream Team for Major League Soccer's Kick Childhood Cancer Awareness Night. These special opportunities are possible thanks to donors and community partners who are committed to letting kids be kids, even as they face a cancer diagnosis.

"Our family decided to stay in Houston so that Nasean can remain close to the people who can care for him best. This is our home now, and it's because of what MD Anderson offers."

Education



Saying 'cheers' to 2022 fellowship graduates: Avis Harden, M.D., Brandon Brown, M.D., Adriana Milagros Trabal, M.D., Amber Gibson, D.O., and Dristhi Ragoonanan, M.B.B.S.

Next-generation oncology leadership takes time...and a little help

Becoming the next generation of leading oncologists doesn't happen overnight. For some, the journey can take 11 to 15 years — from college through medical school, residency, fellowship and, in many cases an advanced subspecialty fellowship. The best and brightest bench science trainees also spend over a decade making their goals come true. The journey includes college, graduate school and doctoral programs that offer training under renowned laboratory stars who are already blazing trails in oncology research.

In FY22, five physicians graduated from MD Anderson Children's Cancer Hospital's Pediatric Hematology-Oncology programs, with four accepting future roles as assistant professors in the division. One will work in the leukemia/lymphoma section, and another will see non-neural solid tumor patients. Another specialist — the first to complete the Pediatric Stem Cell Transplantation and Cellular Therapy Fellowship Program —

will continue in this service, while our recent Pediatric Hospice and Palliative Medicine Fellowship graduate will provide supportive care to our patients.

A research postdoctoral fellow who works in the Kleinerman Laboratory and earned an Odyssey Fellowship in 2021 achieved another feat in 2022 — winning a \$50,000 research award from the Sarcoma Foundation of America to support his study of an immunotherapeutic strategy to mitigate osteosarcoma lung metastases. Two graduate research assistants earned doctorates in August from the MD Anderson Cancer Center's UTHealth Graduate School of Biomedical Sciences — with support from various stipends and other competitive philanthropic awards. The graduates studied the impact of smoking on leukemia formation and the benefit of aerobic exercise in the tumor microenvironment.



Carolers spread cheer

Melissa Melo (second from the left), the Faris Foundation Music Therapist within MD Anderson's Arts in Medicine Program, leads staff on a holiday caroling tour. Arts in Medicine is just one example of the many donor-supported programs that brings joy to pediatric patients and their families.



Celebrating a sweet milestone that brings joy

It was all smiles in December 2021 when a large crew led by the Houston Racquet Club and colleagues from River Oaks Country Club, the Forest Club, the Briar Club and San Jacinto College delivered a gingerbread village to MD Anderson for patients and their families to enjoy. The theme of the confectionary masterpiece was modeled after Neuschwanstein Castle in Bavaria, Germany, just like the original display first donated to MD Anderson in 1993. That donation came from Thomas Preuml, who at the time was a sous chef at the Heritage Club.

When he later moved to the Houston Racquet Club, he continued the tradition and raised money for the Children's Cancer Hospital's Support Programs. The club has raised over \$350,000 for our Child, Adolescent and Young Adult Life Program.

Summer camps made a big return to in-person adventures

Have you ever experienced a vacation so good that months later the memory still makes you smile? Dozens of MD Anderson Children's Cancer Hospital patients and their siblings — ages 18 and younger — would say "yes" after attending one of three week-long summer camps that represented a return to in-person fun since the COVID-19 pandemic began in 2020.

Camp Star Trails, open to young patients and their siblings, was held in June at Camp For All in Burton, Texas — providing the traditional summer camp experience in a safe environment. The Art Barn hosted by the Children's Art Project and Arts in Medicine was just one of the special activities provided at camp. Camp H-Town was held in July at the Four Seasons Hotel Houston. Organizers rolled out the red carpet, turned a hotel floor into a campground, and treated kids to excursions throughout Greater Houston. Camp Star Trails and Camp H-Town support patients and their siblings ages 6-14. Camp AOK was offered in August for older teens, ages 15-18, at Deerfoot Youth Camp in Magnolia. Overall, the number of campers, staff members and volunteers were reduced as a part of COVID-19 safety protocols, but the fun was plentiful. Activities included swimming, canoeing, horseback riding, sports, fireside chats, karaoke challenges, photography lessons, nature walks, fishing and more.



Cotton candy is a great prescription for a fun mid-day boost at camp!

Camps and Special Events also launched its Parent Connect Social initiative to provide an atmosphere for parents to engage in a care-free environment and build a sense of community. Longtime MD Anderson Children's Cancer Hospital collaborator, Sunshine Kids Foundation, sponsored the first event in June 2022 at Pinstripes in Houston. Children and teens enjoyed fun activities at a separate location to provide parents with some downtime. The new program provides engagement opportunities for nonprofit organizations to help meet the needs of parents and caregivers in a meaningful way. Organizations that are interested in sponsoring the quarterly socials should reach out to Tomika Gamble, program manager in Pediatrics, at camps@mdanderson.org.



Surviving and thriving: AYA Oncology Program sets up patients for success

Elizabeth Lugo found out she had cancer on her first day of college classes. "My mom called to tell me," she recalls.

The diagnosis was myoepithelial carcinoma, a rare cancer that usually occurs in the mouth's salivary glands. Elizabeth had some tests performed before she moved from Seattle to Washington D.C. for college, and the family's worst fears were confirmed. For Elizabeth, deciding where to seek treatment came down to finding a cancer center that offered specialized care for adolescents and young adults (AYAs). MD Anderson Children's Cancer Hospital was that place.

AYA cancer patients face many disparities in their care and outcomes. Michael Roth, M.D., associate professor of Pediatrics, and Andrew Livingston, M.D., associate professor of Sarcoma Medical Oncology, co-direct MD Anderson's AYA Program, which serves patients ages 15-39 and aims to meet the unique needs of this demographic. Services include psychosocial counseling, vocational counseling, fertility preservation, genetic testing and survivorship monitoring — just to name a few.

When a cancer diagnosis derailed Elizabeth Lugo's college plans, MD Anderson's Adolescent and Young Adult Oncology Program helped get her back on track.

"Between the time I was diagnosed until today, I think my life expectancy changed six times," Elizabeth says. "But what kept me steady were the friends I made in my AYA support groups. They are some of my best friends, and I've even gotten close with AYA patients at other hospitals. We really share something special having gone through similar experiences."

Elizabeth has persevered through lung metastases, multiple surgeries and rigorous treatment. Yet her dream to pursue higher education continues despite this adversity. She now attends the University of Houston with financial help from the AYA Scholarship Program, which provides funding to support the educational goals of MD Anderson patients and survivors. These scholarships, made possible by donors, help offset tuition and costs from an accredited trade school, undergraduate or graduate educational program. Elizabeth is considering communications or hospitality as a college major and recently applied to the Disney College Program.

"I'm glad I made the decision to come to MD Anderson — and especially to become part of the AYA Program, which means so much to me. The people I've met are amazing. For other patients who now have become my close friends, I'm excited about what's next for us all."



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To see the bright faces that make MD Anderson Children's Cancer Hospital such a special place, use your smartphone camera and the QR code to open a video prepared for our supporters.

