WVUMedicineChildren's

2020 REPORT



77

EXCEPTIONAL ACHIEVEMENT





At WVU Medicine Children's, we're building healthier futures for the children of West Virginia and elevating the care of all West Virginians.

02 EXCEPTIONAL FACTS

02 EXCEPTIONAL GROWTH

- 02 WVU Medicine Children's welcomes two board-certified pediatric dentists
- **03** Honoring our past, celebrating our future

04 EXCEPTIONAL INNOVATION

- **04** Team effort keeps kids, families safe during the pandemic
- 05 New program focuses on quality of life for kids with neurological, musculoskeletal conditions
- **08** Gene replacement therapy for spinal muscular atrophy offers hope to families
- **10** Maternal Infant Care Center expands care for high-risk pregnancies
- 11 New partnership brings neonatal intensive care to Wheeling
- 12 Treating the whole family: Neonatal abstinence syndrome
- **14** What do you want to be when you grow up?
- 15 Strengthening a key network of support for children with autism and their families
- 16 Advanced pediatric surgery, close to home for kids in West Virginia
- 19 Heart program expands treatment offerings, grows team
- **20** Expanding critical care, emergency services
- 22 Growing Pediatric Anesthesiology Division focuses on safety, comfort, and pain control
- 24 Membership in national network leads to improved GI care for kids in West Virginia
- 25 Exceptional generosity: A very successful gala

26 EXCEPTIONAL QUALITY

- 26 Quality Improvement: Toward zero patient harm
- 27 QI project reduces the risk of serious infection for kids with cancer

28 EXCEPTIONAL EDUCATION AND RESEARCH

- 28 Building on a decades-long tradition of rigorous pediatric research
- 30 Medical education and resident physician training highlights

32 EXCEPTIONAL GENEROSITY

- **32** For these two local leaders, the Grow Children's Campaign is personal
- 34 Donor impact: Neonatal Intensive Care Unit brings hope to families across the region
- 36 Walmart associates in Parkersburg give from the heart

As we've all experienced in the last year, new things can challenge us and push us outside of our comfort zones. At the same time, some new things can be cause for excitement and celebration. And, it's for that reason that I believe the production of our first-ever WVU Medicine Children's Annual Report coinciding with near completion of the Hospital's new home couldn't be better timed.

It's an exciting time to be at WVU Medicine and WVU Medicine Children's. For many of us, the construction and opening of a facility like this dedicated to the care of kids from newborns through adolescents was once a mere dream. And now, as this report goes to print, the opening of the Hospital is months - not years - away.

The new Hospital will offer dedicated pediatric care all under one roof - from emergency medicine and radiology to operating rooms and a Birthing Center. We're creating the ultimate family-centered healing environment.

Sure, COVID-19 presented unprecedented challenges to our nation's healthcare system. But at Children's, weathering the pandemic brought us closer as a team. In the early weeks of the crisis, we created a safe environment for our patients and their families, for employees, and providers. To achieve that, we stepped into unfamiliar roles, helped each other learn, and cheered each other on while navigating uncharted territory. It wasn't easy (it still isn't!) But, we do it because we care so deeply about providing the children and families of West Virginia and the surrounding region with the finest medical care possible, no matter what the circumstances.

I hope you enjoy reading our inaugural Annual Report, and I know you join me in my excitement for the opening of our new WVU Medicine Children's Hospital. We couldn't do it without supporters like you.



Albert L. Wright, Jr. President and CEO. WVU Health System

EXCEPTIONAL ACHIEVEMENT

If someone asked you to describe 2020, a few adjectives would probably come to mind right away. Adjectives like "surprising." "Challenging." "Uncertain." As chief operating officer at WVU Medicine Children's Hospital. those are words I'd use to describe 2020, too. But I'd also throw in a few more - like "inspiring," "impressive," and "exciting" – because that's the kind of year we had here at Children's. I am excited to share some of the highlights with you in this, our first-ever annual report.

Our growing clinical and research programs provide life-changing possibilities for patients and their families. You'll read about some of them in this report, with highlights that include:

- Becoming just the second hospital in the United States to offer Connecting Champions, a program that provides mentorship and friendship to children and young adults with cancer.

- Establishing a new Physical Medicine and Rehabilitation (PM&R) program to help children with neurological and musculoskeletal conditions be as active and independent as possible.

- Offering novel gene replacement therapy to babies with a degenerative disease called spinal muscular atrophy.

- Receiving a renewal \$2.1 million grant from the National Institutes of Health to provide cutting-edge clinical trials to underserved populations and to build professional capacity for clinical research.

Our pediatric medical education programs are growing, too, with new initiatives that create a best-in-class experience for our medical students and residents.

We've also been expanding our network of outpatient care centers and hospitals, with new partners in Wheeling, Huntington, and beyond. This means children can receive primary and specialty pediatric care from WVU Medicine Children's providers close to home. Those who need advanced testing or treatment can receive the care they need right here in Morgantown.

And, most importantly, the opening of our new home is right around the corner, and excitement is growing every day. We expect to more than double our staff by the time our state-of-the-art facility opens. And, it is already helping us attract pediatric subspecialists to our faculty who are impressed by our investment in the children of West Virginia.

On a personal note, I would like to thank our Board members for their unfailing support of our new Hospital and acknowledge all of the community members who have made a financial gift toward the project's capital campaign. We are very close to reaching our fundraising goal of \$60 million, thanks in no small part to the tireless work of our Campaign Advisorv Council.

Thank you for being part of our story, sharing it with others, and supporting the Hospital with your generous financial gifts. Together, we are fulfilling our mission of building healthier futures for the children of West Virginia. We appreciate you!



Sincerely.

Amy L. Bush BSN, MBA, RN, CNOR Chief Operating Officer

******** EXCEPTIONAL FACTS

WVU MEDICINE CHILDREN'S IS WEST VIRGINIA'S ONLY...

Hospital with a pediatric cardiac surgery program

Pediatric epilepsy monitoring unit

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Level II pediatric trauma center coupled with a Level I adult trauma center

ECMO (extracorporeal membrane oxygenation) - treatment for patients with life-threatening heart and/or lung conditions

> Children's Miracle Network Hospital, connecting us to the nation's largest network of pediatric hospitals

Hospital to receive MAGNET[®] status for nursing excellence (as part of J.W. Ruby Memorial Hospital), a recognition only 5% of hospitals in the nation have received

BY THE NUMBERS







MAGNET RECOGNIZED

iteele

6,993 **Surgeries**





38,640 ED Visits



Dami Kim DDS

Gina Graziani DDS. MS

EXCEPTIONAL

GROWTH

WVU Medicine

welcomes two board-certified pediatric dentists.

Children's





HONORING OUR PAST, CELEBRATING OUR FUTURE

For nearly 40 years at WVU Medicine Children's, our passion has been to care for the children of West Virginia – improving their lives, comforting their families, and bringing hope and compassion every step of the way.

As the state's largest group of primary care and specialty care physicians, surgeons, and nurses, we're expanding to deliver superior healthcare to newborns, children, teens, young adults, and women in our great state. Our new hospital, opening in 2021, enables us to continue our mission of focusing on our most vulnerable children and on expectant mothers, uncovering cures for childhood illnesses, putting an end to abuse and neglect, and enhancing and expanding services that improve every community across the region.

4 WHAT'S SIX TRACTOR-TRAILER-SIZED AIR HANDLING UNITS XXXX IN THE 28,350,000 **BUILD**? LBS OF CONCRETE

Childrens.WVUMedicine.org

Ages 0-18 Years

EXCEPTIONAL GROWTH



THE TIME IS NOW. WVU MEDICINE CHILDREN'S IS THE PLACE Our New Hospital at a Glance

The nine-story, 150-bed WVU Medicine Children's Hospital will include:

State-of-the-Art Facilities

- Pediatric Intensive Care Unit - Neonatal Intensive Care Unit - Pediatric Acute Care Unit - Pediatric emergency department - Pediatric operating rooms - Advanced pediatric imaging - Birthing Center

Advanced Specialty Capabilities

- Pediatric cardiac catheterization lab - Interventional radiology lab - Endoscopy lab - Heart Institute - Cancer and Blood Disorder Center - Maternal-Fetal Medicine Clinic

Patient and Family Care

- Private inpatient rooms
- Accessible, modern
- medical office building
- On-site pharmacy
- Cafeteria and gift shop

Generous gifts from our community are making this new hospital a reality. Read about our \$60 million capital campaign on page 32.







ROOFTOP HELIPAD CAPABLE OF HANDLING A FULLY LOADED US ARMY BLACKHAWK HELICOPTER

KMM EXCEPTIONAL INNOVATION



From April through August 2020. WVU Medicine Children's providers completed 9,067 clinic-tohome telehealth visits. ⊙: 6,950 €: 2,117



Kathryn Moffett MD

TEAM EFFORT KEEPS KIDS, FAMILIES SAFE DURING THE PANDEMIC

As our nation continues to battle COVID-19, health experts are learning more about the disease and how to protect our communities. And while history is still being written, one thing is certain: WVU Medicine Children's is responding to the crisis with creativity, determination, and heart.

We all remember those early days of the pandemic when news outlets began to report rising case counts in other parts of the United States. WVU Medicine began to prepare for its first case by establishing a "COVID Command Center" to ensure a safe environment for patients and health workers while providing critical medical services amid the pandemic. Work teams included physicians and staff members from the adult and pediatric side of WVU Medicine.

"West Virginia was fortunate to be the last state to have a positive case of COVID-19," Kathryn Moffett, MD, WVU Medicine Children's Pediatric Infectious Diseases Division chief, said. "This gave us time to learn from other hospitals' experiences with the disease. Our command center teams examined the evidence, read countless scientific papers, and talked with our colleagues around the country to learn as much as we could about the disease. We established guidelines covering everything from maintaining social distancing in clinics to deciding which personal protective equipment providers should wear in different care settings."



Dr. Moffett recalled that in the early weeks of the pandemic, the team felt a great deal of urgency to finalize the hospital's COVIDrelated policies for Children's. "We worked through one weekend, collaborating via email, phone, and Zoom meetings," Dr. Moffett said. "That's when I knew that no matter what, we would all step up and do what had to be done to keep patients, families, and staff safe."

Martin Weisse, MD, an infectious diseases specialist and the associate chief medical officer at Children's, credits the entire team with creating a safe environment during the pandemic. "Everyone is doing their part, from nurses and respiratory therapists to front desk and environmental services staff," Dr. Weisse said. "That's one of the silver linings of the COVID-19 crisis – we are all pulling together to innovate, keep each other safe, and take care of our patients. Another silver lining is that the crisis caused us to make safety a higher priority than ever. For example, we implemented a 15-minute 'safety call' every morning with 20 different leaders who report on various COVID-19 concerns. Now we've expanded that call to include any topic related to safety, and it's definitely made Children's safer and more welcoming than ever."

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EXCEPTIONAL INNOVATION

TELEHEALTH EXPERIENCE PAYS OFF

Children's admitted its first COVID-19 patient in June. Since then, the team has treated just a small number of children with the disease. Throughout the pandemic, infection rates among staff and physicians have remained low. Dr. Moffett said that few, if any, people have been infected with the virus at the hospital.

One strategy that helped limit the virus's spread involved ramping up the hospital's telehealth offerings. Telehealth is a way to provide care via video rather than in person. Telehealth can present tremendous technical and organizational challenges for hospitals that haven't done it before. But WVU Medicine Children's was ready.

"About half of the children who receive care at WVU Medicine in Morgantown live more than an hour from the medical center, and traveling here for a clinic visit can be a heavy burden on their families," Charles Mullett, MD, PhD, the Margaret T. & Larry K. Pickering Chair in Pediatrics, said. "For several years, many of our specialists have eased that burden by offering telehealth visits. The hospital was eager to expand telehealth, but it wasn't until COVID hit that insurance companies got behind the concept. We made more progress with telehealth in two weeks than we could have made in two years." >>>

EXCEPTIONAL INNOVATION

A "CLINIC-TO-HOME" **TELEHEALTH PLATFORM**

Before COVID, the primary way Children's offered telehealth was through the WVU Medicine Children's Pediatric Subspecialty and Telehealth Clinic in Martinsburg. Patients come to the clinic and are welcomed by a nurse practitioner, who establishes a video link with a subspecialist at Children's. Physicians from 17 different subspecialties participate in this clinic-to-clinic type of care. Necessary testing and imaging can be performed close to the child's home to minimize travel.

The Martinsburg clinic more or less closed for the first month of the pandemic due to social distancing concerns. But the hospital's experience with video visits helped providers pivot to a different model of telehealth called clinic-to-home. With this care model, families connect with their child's doctor from home. "We were in a better position than most hospitals to flip to clinic-to-home telehealth because we had the infrastructure, personnel, and experience with telehealth." Maggie Jaynes, MD, chief of Pediatric Neurology, said. "Before COVID, we didn't offer any clinicto-home visits. In the first five months of the pandemic, we completed more than 9,000 by video and phone. That's pretty amazing."

WHAT DOES THE FUTURE HOLD FOR TELEHEALTH?

The Martinsburg telehealth clinic is back to full operations, and Children's is planning to open more regional telehealth clinics in 2021. Dr. Jaynes is excited about that expansion, adding that she believes clinic-to-home visits are here to stay. "It wasn't long ago that doctors made house calls, and telehealth

visits can be the next best thing," Jaynes said. "Sometimes an in-person appointment is necessary, but telehealth is ideal for many types of visits and a convenient option for families who live far from a subspecialist."

Physicians, patients, and families who may have been skeptical about using telehealth before are enthusiastic about it now, Paul Rosen, MD, said. Dr. Rosen is the only pediatric rheumatologist in West Virginia, and many of his patients travel up to six hours to Morgantown for an office visit with him. When the pandemic broke out in March, Rosen pivoted the practice to telehealth appointments so he could continue to provide access to care. In three months, he saw 75 unique patients via telehealth, 65% of them new patients. That experience demonstrated to both families and Rosen the value of telehealth. Going forward, the Rheumatology practice will have 50% of the visits scheduled for the office and 50% scheduled for telehealth to ensure all families have their preferences met.

"COVID-19 sparked us to fully embrace video visits," Rosen said. "Families said they appreciated the convenience of a telehealth visit from home. They noted less travel, less time, and less expense, while still getting the care they need. Visits are more comfortable for the kids. Toddlers are more relaxed in their home environment than they are at the doctor's office, and that can make the check-up easier. The older patients enjoy showing me their Lego sets and introducing me to their pets over video. The telehealth visits bring the doctor into the home."



Maggie Jaynes MD



Charles Mullett MD, PhD



Paul Rosen MD



Martin Weisse MD



NEW PROGRAM FOCUSES ON QUALITY OF LIFE FOR KIDS WITH NEUROLOGICAL, MUSCULOSKELETAL CONDITIONS

The new Physical Medicine and Rehabilitation (PM&R) Program is helping children with neurological and musculoskeletal conditions be as active and independent as possible. It's the only program like it in the state of West Virginia and opens up exciting possibilities to improve kids' quality of life.

Leading the program are two fellowship-trained pediatric physiatrists, Stephanie Ferimer, MD, and Mary Louise Russell, MD. "Physiatrists have a unique, holistic perspective on patient care that considers a child's medical as well as rehabilitative needs," Dr. Ferimer said. "We make recommendations based on a child's condition, stage of development, assistive equipment needs, home environment, and therapy progress. And we work with other specialists to coordinate care and minimize medical complications."

Physiatrists help children with a wide variety of conditions, including amputations, brain injuries, musculoskeletal disorders, cerebral palsy, and myelomeningocele (spina bifida). They focus on concerns such as mobility, muscle tone, and range of motion.



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In collaboration with other specialists, Drs. Ferimer and Russell provide inpatient care and work in several outpatient clinics. For instance, they see patients in the Myelomeningocele Clinic along with pediatric urologists and neurosurgeons. This approach ensures that all of the child's care needs are met in one place by a team that makes unified recommendations together.

Another benefit of the new program is that Ferimer and Russell can admit patients to Encompass Health Rehabilitation Hospital of Morgantown and follow these children through their inpatient stay. Encompass is a freestanding, independent hospital and the only one in the state to provide inpatient rehabilitation services for children. This type of rehab can help kids regain function and mobility after an illness or injury.



Stephanie Ferimer MD



Mary Louise Russell MD

The PM&R Program is helping children with neurological and musculoskeletal conditions be as active and independent as possible.

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GENE REPLACEMENT THERAPY FOR SPINAL MUSCULAR ATROPHY OFFERS HOPE TO FAMILIES

Spinal muscular atrophy (SMA) is a rare and potentially devastating disease that can affect a child's ability to breathe, sit up, and move. A team of experts at WVU Medicine Children's Hospital is offering a new, one-time gene replacement therapy to newborns to stop the progression of the disease. Sara McGuire, MD, pediatric neurologist at Children's, discussed the new therapy and its potentially life-changing impact for one baby in West Virginia.

WHAT IS SMA?

SMA is a genetic neurodegenerative, progressive disease - one that is present at the time genes are formed. Children with SMA are missing a gene called SMN1, which produces a protein that is critical to the nerve function that controls muscle activity. The disease attacks motor neurons located in the spinal cord. The loss of the gene causes the motor neurons to die over time (and never come back). Eventually, without treatment, SMA affects a child's ability to walk, breathe, swallow, and control head movements.

There are many types of SMA. Some are fatal, appear. That's why a newborn screening yet some people with SMA have a normal for SMA is revolutionary - it lets us life expectancy. It depends on the type of identify patients earlier and act quickly -SMA and how it affects breathing. Prior to the before they have symptoms - offering development of gene replacement therapy, better outcomes. Now, in West Virginia, treatments for SMA could only help with providers are conducting SMA screening symptoms and help prevent complications. as part of the newborn screening They included machines to help with protocols. breathing, nutritional support, physical therapy, and medicines.

WHAT IS GENE REPLACEMENT THERAPY?

In 2020, Oliver Nix had a routine newborn Gene therapy plays a significant role in screening that showed he may have treating neuromuscular disease. This therapy, SMA. The WVU Medicine Children's team approved by the Food & Drug Administration worked guickly to confirm the diagnosis in 2019 for children diagnosed with SMA and collaborated to break through hurdles under the age of two, supplies the missing and gain insurance approval for the \$2 SMN1 gene. Gene replacement therapy million therapy. begins to save the neurons that haven't died - and prevent other neurons from function, and his ability to feed himself getting sick. This can be life-changing for are potentially vastly better than they patients.

HOW DOES NEWBORN SCREENING FOR SMA HELP?

Since SMA causes motor neurons to die and not come back, it's critical we screen infants for SMA as part of a newborn screening cases.

Patients who receive SMA gene therapy panel. Some newborns have no symptoms of are part of the Muscular Dystrophy Clinic, the disease. Others don't have any signs up where they can access resources, such to the age of one and into adulthood in some as Pulmonology, Cardiology, Physical Medicine and Rehabilitation, and other Evidence shows that the best improvements support necessary for the best quality of come from people treated before symptoms life possible.



Today, Oliver's motor function, breathing function, and his ability to feed himself are potentially vastly better than they would have been.

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NEWBORN SCREENING BRINGS HOPE **TO BABY OLIVER**

Today, Oliver's motor function, breathing would have been. He still doesn't have SMA symptoms. Research studies on this therapy suggest that he should do well. He should be able to roll over, sit up, and even walk, where without therapy, he wouldn't.

TAXE EXCEPTIONAL INNOVATION







In 2020, more than 2,000 babies were born at WVU Medicine Children's, a new record.



Leo Brancazio MD

MATERNAL INFANT CARE CENTER EXPANDS CARE FOR HIGH-RISK PREGNANCIES

EXCITEMENT BUILDS FOR THE NEW BIRTHING CENTER COMING IN 2021

The Maternal Infant Care Center at WVU Medicine Children's isn't just moving in 2021-it's getting a major upgrade.

The Center, which is now on the sixth floor of J.W. Ruby Memorial Hospital, will relocate to the eighth floor of the new Children's Hospital. Expecting mothers will deliver their babies in a spa-like environment in the Hospital's Birthing Center.

Upon arrival on the eighth floor, patients will step out into the Center's lobby area, where they will see a front desk, waiting area, and family lounge. Of its 30 obstetrics rooms, seven will have a labor tub. All the rooms will be large enough to allow babies to stay with their mothers. The Center includes its own operating rooms for Cesarean deliveries. It also includes an infant evaluation area and newborn nursery.

"We looked at the entire birth process – from the moment a patient arrives to the time she leaves with her new baby - not only from a medical standpoint but from a patient and family comfort standpoint. We wanted to be able to deliver the same high quality, family-centered care that we have always delivered in a space that best meets the needs of laboring women and new mothers," Leo Brancazio, MD, chair of WVU Medicine Obstetrics and Gynecology, said. "The unit is also set up so if a mother or unborn baby need the latest and most sophisticated care, they can stay in the unit. The birth of a child is a memorable event, and we are proud to be able to share this time with our patients and their families."

EXPANDED ACCESS FOR MOMS WITH A HIGH-RISK PREGNANCY

About 70% of deliveries at WVU Medicine Children's are high risk, meaning that the care team believes potential complications could affect the mother, baby, or both. In 2020, the hospital dramatically expanded its services for women with high-risk pregnancies by hiring four new maternal-fetal medicine specialists. The physicians, all of whom are fellowship-trained, include Annelee Boyle, MD, medical director of the WVU Medicine Children's Maternal Infant Care Center and Maternal-Fetal Medicine, Kelly Cummings, MD, Catherine Herway, MD, and Megan Varvoutis, MD. Previously, the hospital only had one maternal-fetal medicine specialist, William Holls, MD.

"With five maternal-fetal medicine specialists, we can offer more appointments in Morgantown and at satellite clinics in other parts of the state," Dr. Brancazio said. "We also have established a telemedicine service in Martinsburg, with plans to expand to Wheeling in early 2021. These expanded offerings allow more women to receive highguality care close to home throughout their pregnancy."

The new specialists bring new expertise to WVU Medicine Children's. For example, Dr. Varvoutis has a particular interest in chorionic villus sampling, a prenatal test used to detect birth defects, genetic diseases, and other problems. Adding Dr. Varvoutis to the team allows Children's to offer this type of testing to pregnant women for the first time.



Annelee Boyle

Kelly Cummings MD



William Holls MD



Megan Varvoutis MD

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Catherine Herway

NEW PARTNERSHIP BRINGS NEONATAL INTENSIVE CARE TO WHEELING

When a community doesn't have a neonatal intensive care unit (NICU), critically ill babies must be transported somewhere that does. This can make it difficult for families to participate in their child's care and limit mother-baby bonding at a crucial time in a child's development.

A new partnership between WVU Medicine Children's and Wheeling Hospital solves that problem for babies born in the Northern Panhandle. In 2020, Wheeling Hospital opened a new NICU staffed by WVU Medicine Children's Neonatologist Poornima Murthy, MD, and specially trained nurse practitioners, who provide 24/7 care for critically ill babies.

Wheeling Hospital is the second hospital to establish a NICU with WVU Medicine Children's. The other, Berkeley Medical Center in Martinsburg, provides care for critically ill babies in the Eastern Panhandle. "Previously, babies with critical care needs who were born in Wheeling or Martinsburg would be transferred to WVU Medicine Children's or a hospital in Virginia or Maryland," Mark Polak, MD, medical director of satellite operations for Neonatology, said.

"A NICU stay can last days, weeks, or months, so it's important to keep these kids close to home, where parents can spend time with them without having to worry about travel or lodging," Renee Saggio, MD, chief of the Newborn Nursery Division, said.



Poornima Murthy Mark Polak MD



MD



Renee Saggio MD

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About 165 babies are born with neonatal abstinence syndrome at WVU Medicine Children's each year.



Autumn Kiefer MD

TREATING THE WHOLE FAMILY: NEONATAL ABSTINENCE SYNDROME

ACT NOW TRIAL FOCUSES ON EASING WITHDRAWAL SYMPTOMS WITH FEWER DRUGS

About 165 babies are born with neonatal abstinence syndrome at WVU Medicine Children's each year, and as many as 60 of them experience severe withdrawal symptoms.

"Neonatologists prescribe morphine or methadone for these babies, which helps ease symptoms but also can lead to adverse short- and long-term side effects," Autumn Kiefer, MD, chief of the Neonatology Division, said. "At WVU Medicine Children's, we prescribe morphine and gradually taper down the dose within 17 or 18 days. We'd like to shorten that process, but there hasn't been a lot of research to help establish the safest and most effective way to do that."

A new national research study called "ACT NOW" (Advancing Clinical Trials in Neonatal Opioid Withdrawal Syndrome) could lead to better dosing strategies. "This trial will compare different dosing strategies to help establish rapid-wean regimens," Cody Smith, MD, WVU Medicine Children's neonatologist and principal investigator for the study at WVU Medicine, said. "The goal is to reduce opioid treatment by three days or more."

WVU Medicine Children's is one of 20 hospitals participating in the three-year study sponsored by the National Institutes of Health. ACT NOW is being administered through the IDeA States Pediatric Clinical Trials Network (ISPCTN), which provides medically underserved and rural populations with access to state-of-the-art clinical trials. "This is the first large,



national study focusing on reducing opioid treatment in newborns, and it's exciting to collaborate with other researchers around the country in this work," Dr. Smith said. "Studies like this will drive current and future research and improve care at the local level."

IMPACT WV HELPS BABIES BORN WITH NEONATAL ABSTINENCE SYNDROME BY HELPING THEIR WHOLE FAMILY

Babies exposed to opioids or other substances before birth face many health problems. Neonatologists do all they can to help these children during their hospital stay. But what happens next? For many years, families in West Virginia relied on a patchwork of resources with uneven results. Now, thanks in large part to the Impact WV project at WVU Medicine Children's, these vulnerable babies and the people who care for them receive the support they need to thrive.

Impact WV brings together pediatricians, pediatric subspecialists, occupational and physical therapists, home visiting providers, special education experts, social workers, and representatives from the state's justice system. Their efforts address the needs of children in rural communities exposed to certain drugs (usually opioids) in utero. Many, but not all, of the children were diagnosed with neonatal abstinence syndrome after they were born.

The program is funded by a five-year, \$3 million federal grant and administered by the WVU Center for Excellence in Disabilities (CED) at WVU Medicine. Now in its third year, Impact WV is gaining momentum, Lesley Cottrell, PhD, director of the CED, said. "After a baby with NAS leaves the hospital, the baby and family may face several obstacles that impact their

EXCEPTIONAL INNOVATION

health moving forward," Dr. Cottrell said. "Impact WV is a two-generational approach that creates opportunities for babies and their families. We work closely with families to address social, emotional, economic, and other healthcare access needs. Home visitors with Impact WV, who are usually social workers, help them access whatever resources they need, in areas such as adult education, employment, and assistance with transportation, housing, and food insecurity. That can be a challenge in rural settings, but our team works together to make it happen."

Impact WV also offers extensive training and support for providers at risk for burnout as they care for these high-need families. "This year, our learning portal and Facebook page went live. Those are places where people can find resources and learn how others are solving some of the challenges associated with overcoming NAS," Cottrell said. "As part of the grant, we share our experiences and solutions organizations that serve rural families across the country."

IMPACT WV is based in Morgantown and partners with organizations throughout the state, focusing on rural counties with the highest need. To learn more about Impact WV, visit wvimpact.org.



Cody Smith MD



Lesley Cottrell PhD

MATEXCEPTIONAL INNOVATION



WHAT DO YOU WANT TO BE WHEN YOU GROW UP? **INCREDIBLE NEW PROGRAM BRINGS INSPIRATION AND HOPE TO KIDS WHO HAVE CANCER**

Pediatric oncologist Patrick Tomboc, DO, has had to tell hundreds of families their child has cancer. The news is always devastating for parents and for children who are old enough to understand. This is why Dr. Tomboc, Pediatric Blood and Cancer Center Division chief, is so thankful for a new program at WVU Medicine Children's called Connecting Champions.

Connecting Champions is a Pennsylvania-based non-profit that provides mentorship and friendship to children and young adults with cancer. In 2020, WVU Medicine Children's became just the second hospital in the United States to offer the program and the first to have a full-time Connecting Champions representative working in the pediatric cancer unit.

Immediately after a child is diagnosed with cancer. Dr. Tomboc introduces the family to Friendship Champion Sloane Strauss. Strauss' first question for the child is always, "What do you want to be when you grow up?" It's a jumping-off point for her to find just the right volunteer mentor and friend

who will provide long-term, one-to-one social support throughout the child's cancer journey. Mentors visit with the child (virtually or in person) from once a week to once a month, providing 400 hours or more of support. Interactions typically take place when the child is hospitalized or comes to the hospital for outpatient chemotherapy.

When one child expressed interest in marine biology, Strauss connected her with an aquarist, who takes the young girl on Zoom tours of the Pittsburgh Zoo and PPG Aquarium. Another young lady, who would like to become a paleontologist, has been meeting with a female paleontologist who helped discover the remains of the dinosaur Dreadnoughtus in Argentina. A young man who is passionate about playing in the National Hockey League has been paired with an Olympic hockey player.

"These experiences are a colorful, vivid distraction from the boredom, pain, and nausea that come with a cancer diagnosis. They transport kids to a world they are passionate about," Tomboc said. "It helps parents, too, by reminding them that their child is still

the same person with the same dreams. Their kid is still their kid."

About 20 patients ages 3-22 are involved in the program at WVU Medicine Children's so far. and the feedback has been off-thecharts positive. "Connecting Champions volunteers are unbelievably kind and generous. It's truly amazing to see them give so much just to make our patients' lives a little better," Tomboc said. "To be honest with you, it's reaffirmed my faith in humanity."







One in 21 children in West Virginia has autism spectrum disorder that's more than twice the national average, according to the Centers for Disease Prevention and Control. These children often need a lot of support to reach their full potential, and finding that support can be challenging. The WVU Center for Excellence in Disabilities (CED) and the WVU Medicine Children's Neurodevelopmental Center are two valuable resources for these children and their families. Providers work together to connect families with interdisciplinary services across a variety of settings, including the hospital, outpatient settings, and community areas where children and adolescents with autism engage with others on a regular basis.

"Children with autism often need multiple services," Lesley Cottrell, PhD, CED director, said. "Additionally, parents and other caregivers need respite care, special training to manage their child's needs, and opportunities to hear from others experiencing similar circumstances."



health first aid.

possible.

EXCEPTIONAL INNOVATION

STRENGTHENING A KEY NETWORK OF SUPPORT FOR CHILDREN WITH AUTISM AND THEIR FAMILIES

The Neurodevelopmental Center, which opened in 2018, expanded services to families by providing increased access to specialists, coordinated services, and more capacity for clinical assessment. Still, families often experience long wait times and aren't able to receive early interventions for their children.

To address this problem, the CED and Neurodevelopmental Center significantly increased their programming for individuals with autism in 2020. The initiatives provide:

- Better state-wide coordination. Last year, service providers from around the state began meeting to identify ways to expand and better coordinate services for people with disabilities. This group also improved referral procedures to reduce waitlists where

- Support for the whole family. The CED also initiated the Circle of Parents education and support group; a monthly playgroup for young children with autism and their siblings; and a series of trainings for parents on issues such as positive behavior support, de-escalation techniques, quality of life, and children's mental

WORKING TO CREATE MORE DIVERSE. INCLUSIVE **COMMUNITIES**

The WVU CED is part of a national network of 67 university-based centers and the only one of its kind in West Virginia. Its mission is to improve the lives of West Virginians with disabilities by supporting more diverse, inclusive communities. Last year, in addition to supporting people with autism, the CED served more than 1,100 individuals through direct service and 11,600 individuals through trainings. Currently, the CED supports seven programs and four clinics and distributes information to more than 63,000 individuals of all ages annually.

"Each CED looks different - some focus on serving older adults or kids with chronic diseases," Dr. Cottrell said. "But because ours is the only one in the state, we take a lifespan approach with broad offerings for people of all ages who have a disability. About half of the people we serve are age 25 or younger, and we are here for them at every stage of life."

To learn more about the WVUCED, visit cedwvu.org.

One in 21 children in West Virginia has autism spectrum disorder.

Childrens.WVUMedicine.org

EXCEPTIONAL INNOVATION XXXX





Pediatric surgeons across multiple specialties perform close to 6,000 surgeries at WVU Medicine Children's every year.



Michael Ost MD. MBA

ADVANCED PEDIATRIC SURGERY, CLOSE TO HOME FOR KIDS IN WEST VIRGINIA

Pediatric surgeons across multiple specialties perform close to 7,000 surgeries at WVU Medicine Children's every year. As part of an academic health system - the only one in the state - the team brings extensive training, expertise, and the latest innovative diagnostics and minimally invasive surgical approaches to improve patient care.

"Children's offers surgeries in every subspecialty, and that is good news for families in our region," Michael Ost, MD, MBA, chief surgical integration officer at WVU Medicine Children's, said. "It means that when kids need complex surgeries for conditions such as epilepsy or a congenital heart defect, they can stay close to home instead of traveling to another state for care. With the new children's hospital opening this summer, we expect to attract even more highly skilled and experienced pediatric surgeons to our team. Children's is an exciting place to be for anyone who enjoys helping children with complex surgical needs."



GENERAL SURGERY EXPANDS TO WHEELING. ADDS MINIMALLY INVASIVE TECHNIQUES

The Pediatric General Surgery Team at Children's expanded in 2020 with the addition

of Dan Parrish, MD, who brings advanced expertise in complex and minimally invasive surgery techniques. He and other pediatric surgeons are performing surgeries that would not have been possible at WVU Medicine Children's in the past. In 2020, they performed the institution's first laparoscopic total abdominal colectomy (surgery to remove the entire large intestine). This surgery, on a fouryear-old patient, previously would have required a large open operation performed in three stages. But the team completed it in a single-stage operation leading to a guicker recovery, less post-operative pain, and a shorter hospital stay.

> In addition, Children's recently began offering Pediatric General Surgery services in Wheeling, bringing minimally invasive techniques closer to home for patients in the Northern Panhandle.

The Pediatric Neurosurgery Section is expanding its clinical programs with advanced subspecialty expertise to treat complex conditions.

- Kimberly Hamilton, MD, who is fellowship-trained in pediatric neurosurgery with a special interest in treating brain tumors, vascular conditions, and pediatric brachial plexus/peripheral nerve conditions, in addition to her overall pediatric neurosurgical expertise, joined the faculty. She will help build a multidisciplinary pediatric brachial plexus and peripheral nerve clinic, where experts in Neurosurgery, Orthopaedics, and Neuromuscular Disorder work together to meet patients' needs in a developmentally appropriate way.

- The craniofacial program is expanding under the neurosurgical leadership of Hal Meltzer, MD, chief of the Pediatric Neurosurgery Section and an expert in endoscopic, minimally



Sebastian Brooke MD

EXCEPTIONAL INNOVATION

NEW PEDIATRIC NEUROSURGEONS HELP BUILD PROGRAMS FOR KIDS WITH COMPLEX CONDITIONS

invasive, and innovative cranial distraction and expansion techniques. The multidisciplinary craniofacial program includes neurosurgeons and plastic and reconstructive surgeons. Sebastian Brooke, MD, who is fellowship trained in both craniofacial and microvascular surgery, will become the Plastic and Reconstructive Surgery Team's director of craniofacial surgery in 2021.

- Technology upgrades allow neurosurgeons to provide more minimally invasive surgeries for epilepsy and brain tumors. For example, Mark Lee, MD, PhD, MBA, chair of WVU Medicine's Department of Neurosurgery, recently used the Rosa robotic surgery system to operate on a teenage girl with a recurrent brain tumor. The tumor was destroyed through an incision so small that only one small stitch was needed to close the site.



Kimberly Hamilton MD



Mark Lee MD. PhD. MBA



Hal Meltzer MD

Childrens.WVUMedicine.org

EXCEPTIONAL INNOVATION XXXX



3D PRINTING CAPABILITIES ENHANCES ORTHOPAEDIC SURGERY, TEAM PARTICIPATES IN NATIONAL RESEARCH

This year, the Pediatric Orthopaedic Surgery Team treated everything from congenital abnormalities and fractures to neuromuscular and spinal conditions. With telemedicine and outreach clinics around the state. including locations in Summersville, Spring Mill, Parkersburg, Wheeling, and Morgantown, surgeons offer treatments close to home. The highlights:

- 3D printing provides valuable guidance during advanced surgery for complex spine deformity. The team used 3D modeling to produce drill guides to place pedicle screws for scoliosis surgery.
- Orthopaedic surgeons participated in a national study examining the effect of obesity and socioeconomics on surgical site infections (SSI) after scoliosis surgery. The findings showed that obesity is associated with a higher SSI rate regardless of socioeconomic status. This underscores the harmful effects of obesity and is a warning to surgeons to take extra infection precautions when operating on these kids.
- John Lubicky, MD, was named a Pillar of the Orthopaedic Profession by the American Orthopaedic Association. He was \odot one of eight orthopaedic surgeons to receive the national award, which recognizes physicians for their leadership, service, and accomplishments in the field.

NATIONALLY RANKED UROLOGY SURGERY PROGRAM OFFERS ADVANCED TREATMENT

The Pediatric Urology Program at Children's is ranked by U.S. News & World Report as one of the nation's best and patients who have conditions affecting the kidney, bladder, adrenal glands, or reproductive system from across the country.

- In 2020, the fellowship-trained surgeons provided the most advanced treatments for urologic surgery. These included roboticassisted and laparoscopic surgery and minimally invasive endourology to treat stone disease. This year, they brought hope and healing to children with congenital abnormalities such as ureteropelvic junction obstruction, congenital obstructing megaureter, and vesicoureteral reflux. The surgeons also provided reconstructive genital surgery for complex hypospadias and disorders of sexual differentiation.
- As part of the spina bifida clinic's multidisciplinary team, pediatric urologists collaborated with pediatric neurosurgeons, orthopaedic surgeons, psychologists, nurse practitioners, and many other specialists to treat some of the most complex cases. Some children born with spina bifida have a neurogenic bladder, in which the nerves from the spinal cord to the brain do not work correctly. The team helps prevent damage to the kidneys, reducing the number of urinary tract infections that can occur.

OTOLARYNGOLOGY SURGEONS OPERATE ON A TUMOR NOT PREVIOUSLY **REPORTED IN HUMANS**

In 2020, pediatric surgical volume within the Department of Otolaryngology increased significantly. The team includes Johnathan Castaño, MD, the only fellowship-trained pediatric otolaryngologist in academic practice in West Virginia.

- The Otolaryngology Team successfully performed the first endoscopic-assisted resection of a benign skull base tumor in a premature infant. This operation was the first in the state and the first report of this tumor type in humans.
- Children and vound adults with conditions affecting the eardrum, middle ear, hearing bones, and inner ear who require surgery can count on the Pediatric Otology Team's expertise. Surgical cases, specifically in the areas of pediatric cochlear implantation, pediatric chronic ear disease, and pediatric endoscopic middle ear surgery, have all increased.
- The team worked with colleagues in Pediatric Pulmonology and Pediatric Gastroenterology to expand the Pediatric Aerodigestive Program, which offers multidisciplinary interventions for children with complex aerodigestive disease.



Johnathan Castaño MD

HEART PROGRAM EXPANDS TREATMENT OFFERINGS, GROWS TEAM

In 2020, WVU Medicine Children's became the first hospital in the state to offer a new treatment for babies born with patent ductus arteriosus (PDA). A PDA is the persistent opening of a vessel that connects the blood flow to the lungs and to the body, which are usually separated.

Typically, a PDA resolves on its own within the first few days of life, but when it does not, the condition can lead to too much blood flow and pressure in the lungs. A PDA can be problematic to the proper development and function of the lungs for premature infants whose lungs already aren't fully developed.

Alex Verhoeven, MD, the only pediatric interventional cardiologist in West Virginia, offers minimally invasive options to close PDA. In 2020, he became the first in West Virginia to use the Abbott Amplatzer Piccolo, a new device built specifically to treat PDA in premature infants.

Dr. Verhoeven used an Amplatzer device to successfully treat Symphoni Williams, who had been born 14 weeks early, weighing only 1 pound, 15 ounces. By the time she was referred to Dr. Verhoeven and WVU Medicine Children's in August, Symphoni had spent several months in the hospital requiring machines to support her breathing.

> Amplatzer devices are a mesh of memory metal shaped to fit types of blood vessels and are guided into the problematic blood vessel through a vein in the leg. This minimally invasive approach is easier on an infant than traditional surgery and allows for faster recovery.



Utkarsh Kohli

MD



EXCEPTIONAL INNOVATION

Just a couple days after her procedure at WVU Medicine Children's, Symphoni was free of the wires, tubes, and breathing support she had relied on for months and was home with her twin brother shortly after.

ELECTROPHYSIOLOGIST ADDED TO WVU MEDICINE **CHILDREN'S HEART TEAM**

New treatment technology isn't the only addition to the WVU Medicine Children's Heart Institute's team. In December, Utkarsh Kohli, MD, joined WVU Medicine Children's. A pediatric and adult congenital cardiologist and electrophysiologist and an associate professor of pediatrics, Dr. Kohli is fellowship trained in electrophysiology. He has special expertise in caring for patients with complex congenital heart disease and conditions affecting the heart's electrical system, including arrhythmias, inherited channelopathies such as Brugada syndrome, Long QT syndrome (LQTS), catecholaminergic polymorphic ventricular tachycardia, and cardiomyopathies.

Dr. Kohli was drawn to WVU Medicine Children's by the opportunity to learn from and practice alongside pediatric cardiology leaders.

Christopher Mascio, MD, will join the team as the division chief of Pediatric Cardiothoracic Surgery, executive director of WVU Medicine Children's Heart Institute, director of Pediatric Heart Transplantation, and associate program director of the Cardiothoracic Surgery Fellowship Program. Jai Udassi, MD, will serve as the division chief of Pediatric Cardiology, medical director of the Cardiovascular Intensive Care Unit and pediatric cardiovascular services, and state pediatric cardiac and congenital heart surgery liaison.

"We are very excited to have Dr. Udassi and Dr. Mascio join the WVU Medicine Children's family and bolster our outstanding WVU Medicine Children's Heart Institute, Christopher Mercer, MD, interim division chief of Pediatric Cardiology and the medical director of pediatric Non-Invasive Cardiac Testing, said.



Christopher Mascio MD



Christopher Mercer MD



Jai Udassi MD



Alex Verhoeven MD

Just a couple days after her procedure, Symphoni was free of the wires, tubes, and breathing support.

EXCEPTIONAL INNOVATION





Upon completion of the new space, Children's will go from its current fourbed pod to a full-size, 24/7 pediatric ED.





Melvin Wright DO

Rachel Blasko MHA

EXPANDING CRITICAL CARE, EMERGENCY SERVICES

Children aren't just small adults. They have unique needs and require the specialized care offered by pediatric-trained providers. This is especially true for children in need of emergency or critical care.

In 2020, WVU Medicine Children's expanded critical care services, and in 2021, the hospital will expand emergency and urgent care offerings. "Every year, the demand for and reach of our Transport Team continues to grow," Melvin Wright, DO, medical director of the Pediatric Intensive Care Unit and Transport Team, said. "We've done extensive training and outreach with community providers to raise awareness of our services in order for local hospitals to be able to respond quickly to the critical needs of women and children."

CRITICAL CARE TRANSPORT TEAM ADDED TO SPEED CARE FOR KIDS ACROSS WEST VIRGINIA

Critically ill infants and children don't always have close or convenient access to the level of care offered in a neonatal or pediatric intensive care unit. The WVU Medicine Children's Critical Care Transport Team provides a state-of-the-art mobile intensive care unit to transport these patients to Children's in Morgantown safely. The Team also transports expectant mothers experiencing medical emergencies.

In summer 2020, Children's added a second Critical Care Transport Team to meet the demand across the state and the surrounding region.

"In some cases, it can take four hours to get to patients in need - and another four hours to get them back to WVU Medicine Children's," Rachel Blasko, MHA, assistant vice president of operations for WVU Medicine Children's, said. "This can tie up



	2019	2020
INBOUND TRANSPORTS	521	547
OUTBOUND TRANSPORTS	18	34
TOTAL	539	581

our team, keeping us from helping others. By adding another team, we create a dynamic here in the state of West Virginia where we can say 'yes' more often and get children to the place most equipped at handling their care. And all the while they are in transport, they are being cared for by neonatal and pediatric trained nurses and respiratory therapists who are incredible at what they do."

NEW EMERGENCY DEPARTMENT COMING IN 2021

When the new WVU Medicine Children's Hospital opens in 2021, it will include an expanded Emergency Department (ED) dedicated exclusively to the care of children.

Upon completion of the new space, Children's will go from its current four-bed pod to a full-size, 24/7 pediatric ED.

The new ED will include triage space, four exam rooms, an isolation/ decontamination room, two trauma bays, and two rooms specially

designed to care for children with behavioral health needs.

In addition, three rooms within the Department will be used to run WVU Medicine Children's Rapid Care. Open from 8 am to 8 pm, seven days per week, Rapid Care offers urgent care services for children who need quick treatment but don't require an ED's full resources. Rapid Care patients and their families will also benefit from easy access to the WVU Medicine Children's outpatient pharmacy, located on the same floor inside the new hospital.

EXCEPTIONAL INNOVATION



The percentage of NICU calls dispatched within 30 minutes went from 42.44% in 2019 to 57% in 2020.

Julie Phillips, MD, emergency medicine physician and medical director for the Pediatric ED at WVU Medicine Children's, said the new Department will be a great asset for Morgantown and the surrounding area.

"WVU Medicine Children's is home to the only pediatric trained emergency medicine physicians

in our area," Dr. Phillips said. "Our new ED will add capacity and flexibility, giving us the ability to offer the highest level of emergency care for even more children in our community and beyond."

Phillips and the team are currently recruiting additional emergency medicine providers and preparing training for first responders who will begin using the new Emergency Department upon its completion.



Julie Phillips MD

******** EXCEPTIONAL INNOVATION





James Cain MD, MBA

GROWING PEDIATRIC ANESTHESIOLOGY DIVISION FOCUSES ON SAFETY, **COMFORT, AND PAIN CONTROL**

Pediatric specialization is essential when caring for young patients, according to James Cain, MD, **MBA**, chief of Pediatric Anesthesiology at WVU Medicine Children's. "Children are not little adults their bodies' structure and function are very different in terms of how they respond to illness, medications, and surgery," Dr. Cain said. "Children also respond differently from an emotional and psychological standpoint."

That's why support from and for families is critical in children's surgical care. "Family-centered care is the hallmark of pediatric care," Dr. Cain said. "It's a component that our anesthesiologists and nurse anesthetists incorporate into everything they do."

In just the last three years, the Anesthesiology Division has built upon an exceptional foundation, tripling in size to include 13 anesthesiologists and 15 pediatric-focused certified registered nurse anesthetists (CRNAs), led by CRNAs Jake Lindstrom and Kelly Meyers. The Division includes homegrown WVU Medicine physicians and CRNAs, as well as those from institutions such as Harvard. Johns Hopkins, the Cleveland Clinic, Children's National in Washington, D.C., and the Universities of Michigan, Pennsylvania, and Pittsburgh. The Division comprises approximately 75% of all of the specialty-trained and/or board-certified pediatric anesthesiologists in West Virginia.

GROWTH BRINGS ENHANCED CAPABILITIES TO SURGICAL SPECIALTIES

The expanding program brings specialized expertise that typically is only available at larger children's hospitals across the country. Its growth has gone hand-in-hand with the growth and development of the hospital's pediatric surgical programs. For example, Cain said. "Pediatric Neurosurgery. an area of rapid growth particularly in epilepsy surgery and complex skull surgery, relies on specialty trained pediatric anesthesiology care."

Additionally, WVU Medicine Children's has long been the only hospital in West Virginia offering advanced anesthesiology care for children with congenital cardiac disease. Led by David Rosen, **MD.** the Pediatric Cardiac Anesthesiology Program will add another pediatric cardiactrained anesthesiologist this summer.

NEW ANESTHESIOLOGY TECHNIQUES AND PRIORITIES

A growing area of pediatric anesthesiology is regional anesthesiology and acute pain management. "We use a holistic approach to provide pain relief for children after surgery or when hospitalized with painful conditions such as a traumatic injury, cancer, or sickle cell crisis," Cain said. "Traditionally, these patients' pain was largely treated with opioids, which may result in undesirable side effects such as drowsiness or nausea and, regrettably, may contribute to our nation's opioid crisis. We are using different types of medications now and rapidly decreasing the use of opioids."

Furthermore, the Pediatric Regional Anesthesia and Acute Pain Section, led by Joshua Eaton, DO, provides advanced regional techniques. Utilizing specialized techniques and equipment, the team can identify particular nerves and place local anesthesia directly next to them to block pain an approach that helps with post-operative pain relief and side effects.

The expanding Anesthesiology Program brings specialized expertise that typically is only available at larger children's hospitals across the country.

EXCEPTIONAL INNOVATION



LOOKING AHEAD

Pediatric anesthesiologists and nurse anesthetists work closely with other physicians, nurses, and child life specialists to ensure that surgery is a positive experience for the whole family. "When the new WVU Medicine Children's Hospital opens, the perioperative floor will feature comfortable spaces where parents and siblings can relax before, during, and after the child's surgery," Cain said. "Family is a tremendous source of support for children who need surgery. We ensure that every family member feels as welcome and special as our patients do."



David Rosen MD



Joshua Eaton DO

TAXE EXCEPTIONAL INNOVATION





'Patients in remission can weather a pandemic better than those with active disease." Brian D. Riedel MD



MEMBERSHIP IN NATIONAL NETWORK LEADS TO IMPROVED GI CARE FOR KIDS IN WEST VIRGINIA

Inflammatory bowel disease (IBD), which includes conditions like Crohn's disease and ulcerative colitis, can take a heavy physical and emotional toll on children and young adults. Many face dietary restrictions, steroid regimens, and infusion therapy with powerful immunosuppressive drugs.

The Gastroenterology (GI) Team at WVU Medicine Children's focuses on improving the lives of those living with IBD by moving them toward disease remission - especially remission without the use of steroids, which can have negative short- and longterm side effects.

In 2018, the WVU Medicine Children's team ioined the ImproveCareNow Network, a national collaborative working to raise the quality of care for children and youth with IBD. In just two years as an ImproveCareNow Network member, Children's helped 82% of its IBD patients achieve steroidfree remission. This meets the ImproveCareNow Network national benchmark.

"Just being cared for at an ImproveCareNow Center like ours greatly elevates your chance of achieving clinical remission," Brian D. Riedel, MD, chief of WVU Medicine Children's Pediatric Gastroenterology, Hepatology, and Nutrition and physician leader for the hospital's ImproveCareNow Center, said. "We were fast out of the gate to reach the ImproveCareNow Network benchmark, which I credit to our committed team."

REMISSION SUCCESS, TELEHEALTH PROVED CRITICAL TO CARE DURING THE PANDEMIC

This high steroid-free remission rate for patients at WVU Medicine Children's has been particularly valuable throughout the COVID-19 pandemic.

"Patients in remission can weather a pandemic better than those with active disease," Dr. Riedel said. "This is especially true for those in steroidfree remission, as steroid use has proven to be a risk factor for worse outcomes in those who contract COVID-19."

Riedel said the program's remission rate success was also critical when in-person appointments and interventions were limited. While patients on IV infusion therapies were still seen in person, others could access their physicians, nurses, and dietitians through virtual visits.

"Our patients benefit from being a part of WVU Medicine Children's, as this institution has a high level of experience with telehealth," Riedel said. "In the first 10 days of the pandemic, as things were shutting down, we easily and quickly shifted to virtual visits."

NEW THERAPIES ON THE HORIZON

Riedel and his team continue to review and test new approaches - focused on new nutrition therapies - to induce and maintain disease remission for their patients with IBD.

"Nutrition therapy is effective at inducing IBD remission," Riedel said. "We offer exclusive enteral nutrition, which is a liquid diet, but this therapy can be complex and isn't the best longterm solution."

In 2020, Riedel and another WVU Medicine Children's provider were trained to offer a less restrictive dietary management program. This partial enteral nutrition program combines whole foods and liquid nutrition to induce and maintain remission.

"Offering new therapies like this takes a multidisciplinary team with a committed dietitian," Riedel said. "We are proud of the program we've built here over the last decade at WVU Medicine Children's, and we're proud of the level of GI care we offer to kids all across West Virginia."

EXCEPTIONAL INNOVATION





The 17th annual WVU Medicine Children's Hospital gala was held February 8, 2020, at the Morgantown Marriott. The evening was emceed by Pittsburgh Steeler Ryan Shazier while 1,201 guests enjoyed gourmet dining. silent and live auctions, and live entertainment. It was a record-breaking year raising more than \$700,000. Funds will support the WVU Medicine Children's Grow Children's Building Campaign.

- \$36,445 raised for NICU swaddles/packets during the Bid for Good

- \$472,500 raised from 61 event sponsors

- ♦ 6 Exclusive ▶ 8 Gold
- ▶ 4 Silver ▶ 43 Bronze

- Silent and live auctions raised \$183,788

For more stories of Exceptional Generosity, turn to page 32.

EXCEPTIONAL QUALITY







The new-and-improved QI process is working, and the team attributes its success to Hospital leadership and culture.



QUALITY IMPROVEMENT: TOWARD ZERO PATIENT HARM

WVU Medicine Children's took great strides in 2020 toward establishing a robust guality improvement (QI) program. QI projects focused on improving nutrition in underweight newborns to treating infections in kids with cancer (see sidebar). Behind the scenes, guality leaders continued to build an infrastructure that provides clinicians and others with the support they need to design, conduct, and evaluate QI projects.

EXPANDING THE QUALITY COUNCIL

Pediatric hospitalist Richard Brant, MD, provides clinical leadership for the quality work at Children's as medical director of quality and performance improvement. Working alongside him is Jennifer Ball, MPH, CPHQ, quality coordinator, and the newest member of the team, Kim Kupec, director of performance excellence. Having three people on the Pediatrics Quality and Safety Team is a significant departure from previous years - before 2017, there were none.

Dr. Brant leads the Women's and Children's Quality Council, which oversees quality and patient safety activities at WVU Medicine Children's Hospital. About 40 people from various specialty areas attend monthly meetings to share internal efficiency, guality, and patient safety data and discuss successful QI strategies, new project ideas, and best practices. "These meetings are a good opportunity for people to talk about QI efforts in their area. Previously, someone in the Pediatric Intensive Care Unit wouldn't necessarily know what was going on in the Maternal-Infant Care Center, for instance," Ball said. "Sharing information across units helps all of us see opportunities for improvement and avoid duplicating efforts. This year, representatives from surgery and the subspecialty medical staff attended these meetings, which expanded our scope."

STANDARDIZING THE QI CURRICULUM

As Brant and his team looked ahead to 2021, they recognized a need for a more formalized QI process within Children's. The first step, establishing a QI steering committee, would provide support and resources for departments starting a QI project. Next, they decided to create a more robust QI program within the General Pediatrics Residency curriculum (all of these residents must complete a QI project to graduate).

Now, each General Pediatrics resident works with a faculty advisor on his or her own own QI project. The advisor helps with project design and approvals, provides templates and tools, and offers advice and guidance. Brant and other faculty members host a workshop every six weeks, during which the residents discuss their progress.

The new-and-improved QI process is working, and the team attributes its success to Hospital Leadership and culture. "QI projects require time, expertise, and collaboration, as well as organizational support," Jeffrey Lancaster, MD, division chief of Pediatric Hospital Medicine and medical director of Pediatric Acute Inpatient Unit, said. "Dr. Brant's knowledge and vision has unified different efforts by promoting growth and improvement in all quality domains."



Jeffrey Lancaster MD INTERNATIONAL OI NETWORKS

WVU Medicine Children's participates in several quality improvement networks to achieve its goal of zero patient harm. These national and international networks provide member hospitals with opportunities to:

- Engage in large-scale research projects
- Learn about best practices - Network and learn from others who share a passion for QI
- Participate in leadership
- development programs
- Share QI data

One example of these networks is Solutions for Patient Safety (SPS), an international cohort of children's hospitals that collaborate to ensure best practices. Right now. SPS works with member hospitals to minimize unplanned extubations in the neonatal intensive care unit (unplanned extubations occur when a breathing tube is removed unintentionally, either by the patient or a provider). Through this work, WVU Medicine Children's is reducing unplanned extubations and getting closer to national benchmarks for safety.

"Partnerships like this help Children's continually improve, implement bestpractice standards, and develop a safety culture," Cheryl Jones, RN, MSN, vice president and associate chief nursing officer for Children's, said. "We are making progress thanks to a truly multidisciplinary effort with leadership from all of our departments."



MPH, CPHQ

Cheryl Jones RN, MSN, NEA-BC

EXCEPTIONAL QUALITY

PARTICIPATING IN NATIONAL AND



Kim Kupec

QI PROJECT REDUCES THE RISK OF SERIOUS INFECTION FOR KIDS WITH CANCER

Pediatric cancer patients are at high risk for developing infections, and a fever may be the first sign of a life-threatening infection. Research shows that the longer a patient has a fever coupled with a low white blood cell count, the higher the risk of serious infection. When these patients present to the clinic or hospital, it is critically important to start antibiotics as soon as possible.

In 2020, the WVU Medicine Children's Pediatric Hematology and Oncology Team completed a quality improvement project to speed up the process of providing antibiotics to these patients. Now, when a child with cancer comes through the doors with a fever, a nurse activates a pediatric oncology emergency alert to notify the care team. Then, it's all hands on deck to obtain lab tests and fast-track the patient's antibiotics.

"In early 2018, our response time was sometimes more than three hours," Patrick Tomboc, DO, chief of the Pediatric Hematology and Oncology Division at WVU Medicine Children's, said. "By standardizing our approaches, we have achieved and sustained our goal of providing antibiotics to these patients in one hour or less, thereby decreasing our patients' risk of more adverse outcomes."

******** EXCEPTIONAL RESEARCH AND EDUCATION

EXCEPTIONAL RESEARCH AND EDUCATION





Mark Polak MD

BUILDING ON A DECADES-LONG TRADITION OF **RIGOROUS PEDIATRIC** RESEARCH

Pediatric researchers participated in more than 80 clinical, basic, and translational studies last year, reflecting WVU Medicine Children's commitment to providing children and adolescents with advanced therapies. External funding for the institution's active research studies totaled \$3.68 million from government and industry sources in 2020.

For almost 40 years, WVU Medicine Children's has brought life-changing pediatric research to the field of medicine, including trials testing of the country's first surfactant replacement therapy for premature babies. "Research is the reason that survival rates of tinv babies over the last half-century saw significant improvements," Mark Polak, MD, medical director of satellite operations for Neonatology, said. "Now, medically fragile kids who would have died soon after birth are sailing through the Neonatal Intensive Care Unit and thriving in early childhood."

More than half of pediatric faculty members at WVU Medicine Children's engage in research in the laboratory, clinic, and inpatient settings. All pediatric clinical trials are conducted under the auspices of the institution's Pediatric Research Unit (PRU). The PRU's seven-person staff works closely with research investigators, providing coordination. regulatory assistance, and other resources to ensure that each study is safe, ethically sound, rigorous, and maintains best clinical practices.

BRINGING MORE PEDIATRIC RESEARCH OPPORTUNITIES TO WEST VIRGINIA

The PRU, established three years ago, is funded in part by a five-year, \$1.8 million grant from the National Institutes of Health (NIH). In 2020, WVU Medicine received a renewal \$2.1 million grant from the NIH to provide cutting-edge clinical trials to underserved populations and to build professional capacity for clinical research. "This money will help pay for select research costs, provide incentives for families and children, and support professional development opportunities for our faculty to strengthen their clinical research training," Lesley Cottrell, PhD, vice chair of the Department of Pediatric Research. Dr. Cottrell leads the PRU with Michelle Shaffer, CCRP, a clinical nurse care manager at WVU Medicine, said.

Many pediatric research trials at Children's are sponsored by ECHO IDeA States Pediatric Clinical Trials Network (ISPCTN), a national network dedicated to expanding clinical trials in states with historically low NIH funding, such as West Virginia. "Together with strong and sustained partnerships throughout the state, WVU Medicine Children's is building its clinical research program to improve therapies for conditions such as respiratory syncytial virus (RSV), COVID-19, cancer, cystic fibrosis, and neonatal abstinence syndrome," Dr. Cottrell said.

STUDIES IN 2020

or obese."

WVU Medicine Children's is participating in several pivotal studies involving the prevention of respiratory syncytial virus, which can be serious in infants. These studies are evaluating a new, long-life, highpotency monoclonal antibody called nirsevimab. Results from one of these studies was recently published in the New England Journal of Medicine (July 30, 2020).

Researchers at Children's also participate in a phase 1 trial looking at the pharmacokinetics and safety of a fifth-generation cephalosporin



"Research is the reason that survival rates of tiny babies over the last half-century saw significant improvements." Mark Polak MD

RESEARCHERS TAKE PART IN NATIONAL, INTERNATIONAL

WVU Medicine Children's Pediatric Endocrinologist Brian Ely, MD, is principal investigator for a new, NIHfunded, 15-site pediatric trial that began in 2020. The VDORA1 trial will explore a novel therapy for children who have asthma and are overweight or obese. "Obesity and asthma are epidemic in the United States, and scientists have discovered that children who have both of these inflammatory conditions also have low levels of vitamin D," Dr. Ely said. "The VDORA1 trial will explore vitamin D supplementation as a potential low-cost, readily available way to address the inflammatory aspects of these two conditions. This could lead to better asthma control among children who are overweight

antibiotic ("pharmacokinetics" refers to how a drug moves within the body). "Phase 1 research is critical for ongoing drug development and requires high-caliber research teams to safely conduct these important projects," Dr. Polak explained. "Our ability to enroll patients in such studies speaks to the fact that parents trust doctors at WVU Medicine Children's. When we present them with an opportunity to advance pediatric research, even with an early, Phase 1 study like this, they understand how important it is and want to participate."



Lesley Cottrell PhD



Brian Ely MD

******** EXCEPTIONAL RESEARCH AND EDUCATION

EXCEPTIONAL RESEARCH AND EDUCATION



"Now, more parents can participate because they XXX can meet with us from their homes." Linda Friehling MD

MEDICAL EDUCATION AND RESIDENT PHYSICIAN TRAINING HIGHLIGHTS

COVID-19 CREATES CHALLENGES AND OPPORTUNITIES

COVID-19's impact on hospitals has been in the news for months. But less well-known is the pandemic's effect on medical education and training. Students in every WVU School of Medicine program were sent home in the early days of the pandemic. For the next several weeks, they used video conferencing and other technologies to continue their training. This was especially challenging for medical students participating in pediatrics clerkships, which typically involve in-person rotations in different specialty areas, such as hospital medicine, newborn nursery, and subspecialty clinics.

"We had to adapt quickly to provide hospital rounds, patient interactions, and case studies in a virtual format," Lisa Costello, **MD**, pediatric hospitalist and co-director of clerkships, said. "It wasn't ideal, but our faculty pulled together and provided highquality pediatric medical education."

ZOOM FORMAT ENRICHES THE LEARNING EXPERIENCE

The move to virtual learning, while temporary, became a silver lining for Project DOCC (Delivery of Chronic Care), a training initiative at the WVU School of Medicine. Project DOCC introduces students in the Medicine, Nursing, Pharmacy, and Physician Assistant programs to parents of children who have special care needs. The goal is to help learners understand the challenges these families face and appreciate the importance of the familycentered medical home model. This model is based on a philosophy of primary care that is patient-centered, comprehensive, teambased, and well-coordinated.

Previously, parents traveled from different parts of the state to share their stories with students in person. COVID-19 forced a transition to video conferencing technology. Instead of limiting Project DOCC, the new technology helped the initiative expand. "Now, more parents can participate because they can meet with us from their homes," Linda Friehling, MD, a complex care pediatrician who helps coordinate Project DOCC, said. "I think this gives learners a richer experience because they can see the family's home environment and even meet the child, which wasn't possible before. Thanks to Zoom, learners from all three of our campuses can participate easily since they don't have to travel to Morgantown on the scheduled day."

Each half-day training session includes about 15 learners from different training programs. After a brief introduction, learners break into interprofessional groups of 4-5 people and talk with a parent/ educator about what it's like to care for a child with a chronic medical condition. This lasts for 35 minutes and is followed by another 35-minute session with a different parent. Then the entire group meets to debrief about what they learned.

Hundreds of learners participated in Project DOCC in 2020. "These conversations are a unique opportunity for learners to hear from two different parents and ask questions in a personal space," Dr. Friehling said. "Most of the School of Medicine curriculum focuses on science, but Project DOCC is one way we can focus on what it means to provide care in a compassionate, humane way."

ENHANCED TRAINING OPPORTUNITIES FOR RESIDENT PHYSICIANS

WVU Medicine Children's Pediatrics Residency Program continued its tradition of excellence in 2020, providing residents with dynamic primary and specialty care training experiences. Highlights included:

- for trainees.

educational series. The series features conferences where faculty members, pediatrics residents, and Internal Medicine-Pediatrics residents analyze potential patient safety concerns and discuss possible improvements in the healthcare delivery system. Some residents may even develop and implement their own improvement plans. In 2020, Pediatrics Resident Breanna Nolan, MD, worked with the Department of Radiology on a safety initiative to improve care for children who have an internal medical device (such as spinal rods for scoliosis) and need to undergo magnetic resonance imaging. Her work underscores the fact that it is often those on the frontline of care delivery who see small inefficiencies that, if resolved, can lead to improvements for individual patients.

- Offering a new pediatric emergency medicine

curriculum. The curriculum, developed by Emergency Medicine Physician Christopher Kiefer, MD, and Pediatric Hospitalist Joseph Lynch, MD, uses high-fidelity manikins to simulate acutely ill children. It gives residents opportunities to identify the disease process and react to changes in the patient's condition in real-time. Following each case, the residents participate in a debriefing session facilitated by Drs. Kiefer and Lynch, which serves as a crucial component of the simulation program.

- Adding pediatric hospital medicine

simulations to the curriculum. Pediatric Emergency Medicine physicians and hospitalists developed new multi-day case scenarios in 2020. The scenarios follow simulated patients from the emergency department to inpatient care through hospital discharge, providing a comprehensive, realistic educational experience

- Building on the success of the Morbidity, Mortality, and Improvement (MMI)



Linda Friehling MD



Christopher Kiefer MD



Joseph Lynch MD



Breanna Nolan MD

EXCEPTIONAL GENEROSITY



As construction continues on the new WVU Medicine Children's Hospital, Steve Antoline and Jeff Hostetler can't help but feel a sense of pride in what the community is accomplishing together. These two men, who are co-chairing the \$60 million Grow Children's Campaign, believe that when the Hospital opens this summer, every West Virginian will feel the same sense of pride and appreciation that they do.

So far, individual donors and local businesses have contributed more than \$56 million toward the campaign-an astonishing accomplishment for any hospital, especially in the midst of a pandemic. "West Virginia is a beautiful place to live, with good-hearted people who are truly deserving of a world-class hospital like the one we are building," Antoline, a semi-retired businessman, said. "I'm so proud of how people have stepped up to support this campaign, and I certainly feel blessed to be part of it. This experience has proven to be a labor of love for me."

Antoline and Hostetler are long-time supporters of the Hospital and have served on the WVU

Medicine Children's Campaign Advisory Council for several years. As campaign co-chairs, their primary role is to promote awareness of the new Children's Hospital, as well as meet with individuals and businesses about donating to the fundraising effort. For example, Antoline teamed up with his longtime friend Steve Ferguson, a fellow West Virginian, to lead a fundraising initiative in the Mountain Lakes Region that has generated almost \$600,000 in donations so far. In addition, Antoline and his family made a generous contribution of their own to support the new Hospital's Antoline Family Welcome Center, which will be located directly inside the main entrance.

Hostetler's personal experiences as a dad led him to a "side project" - building an incredible Family Resource Center located on the top floor of the new Hospital. The Center will feature a kitchen and family laundry room, three lounge areas, two gaming rooms, a retail coffee shop, and other amenities to help families be as comfortable as possible during a child's hospital stay.





Hostetler, the former West Virginia University quarterback who played in the National Football League for 15 years, knows how vital this type of support is when a child is hospitalized with an illness or injury. "All three of our sons faced lifethreatening medical issues when they were young, and going through that was very tough for my wife, Vicky, and me," he said. "It's so exciting to be able to give back and help families who are facing similar experiences."

The Family Resource Center, located on the "I am a Mountaineer" floor, will overlook Milan Puskar Stadium and have a locker room theme. More than 65 former WVU athletes, including former NFL quarterback Marc Bulger and Major League Baseball infielder Jedd Gyorko, have donated a total of about \$1 million to the project so far.

"I remember coming over to the hospital to visit kids when I played for WVU, and that experience helped me realize what's important and what's not



Individuals or businesses interested in supporting the WVU Medicine Children's "Grow Children's" Capital Campaign can call 304-598-4346 or visit WVUMedicine.org/growchildrens.



IKM renderings left to right: Antoline Family Welcome Center | Family Resource Center

Left to right: Jeff Hostetler and Steve Antoline with WVU Medicine Children's patients

EXCEPTIONAL GENEROSITY



important in life," Hostetler said. "Being part of the campaign is something we can all do to have a lasting impact on families who are going through a difficult time. I'm just so thankful for everyone in our community who has rallied around this project. They are making a positive impact that will touch lives throughout our great state."

As campaign co-chairs, Antoline and Hostetler have seen first-hand how much planning and coordination have gone into bringing the new state-of-the-art Hospital to life. "You just won't find a more passionate and hard-working group of people than those who serve WVU Medicine Children's," Antoline said. "It's been exciting to see the new Hospital materialize, knowing it will offer the finest care to children in West Virginia. I'm extremely proud of our state and the incredible strides that have been made in the medical field here, and that's thanks to WVU Medicine Children's and all of those who have so strongly supported it throughout the years."

Childrens.WVUMedicine.org

EXCEPTIONAL GENEROSITY



At 26 weeks and 3 days old, baby Scarlett was ttt born by emergency Cesarean-section weighing just 1 pound, 13.3 ounces.

DONOR IMPACT: NEONATAL INTENSIVE CARE UNIT BRINGS HOPE TO FAMILIES ACROSS THE REGION

AT JUST 1 POUND 13.3 OUNCES, SCARLETT FACED TREMENDOUS HURDLES

Each year, 1 in 10 babies in the United States - almost 380,000 - are born too soon. Premature birth is a reality that many parents face, although it's often unexpected.

Sydney Fetsco, who lives in Bruceton Mills, WV, was excited to become a mom. Healthy and enjoying her pregnancy, she kept up with her prenatal visits and marked each milestone along the way. Like so many moms, Sydney read about what to expect during pregnancy and thought about the day she would welcome her first child.

But just 23 weeks into her pregnancy, Sydney experienced unexpected complications. Her water broke because of a condition called preterm premature rupture of membranes (PPROM). In a healthy pregnancy, water breaks during labor or within 24 hours before starting labor. The earlier the water breaks, the more serious it is for mom and baby.

Sydney rushed to the hospital, where the Obstetrics and Gynecology team was on standby and ready to examine her. They quickly developed a plan to keep both mom and baby safe and infection-free. This required Sydney to remain in the hospital until the baby was born. With PPROM, the goal is to maintain the pregnancy for as long as possible, so the baby continues to develop and the lungs have more time to grow.



AN EMERGENCY C-SECTION

With close monitoring and expert interventions, Sydney was able to delay delivery for several weeks. At 26 weeks and 3 days gestation, bal Scarlett was born by emergency Cesareansection weighing just 1 pound, 13.3 ounces. same day, Sydney celebrated her 24th birthda

The care team immediately moved Scarlett fro the delivery room to the WVU Medicine Childr Level IV Neonatal Intensive Care Unit (NICU). There, neonatologists, NICU nurses, and othe pediatric providers assessed and stabilized Scarlett and developed a plan to address her many needs.

The hurdles Scarlett faced were ones that the team sees all too often with premature babies addition to low birth weight, Scarlett had stage retinopathy of prematurity (ROP), an eye disor affecting more than 14,000 babies each year can lead to vision loss. She also had a collaps lung that required two chest tubes, urinary trainfection, and grade 2 brain bleed that increas the risk of cognitive and physical impairments

EXCEPTIONAL GENEROSITY

INCREDIBLE PROGRESS

Sydney said that because of her

by	daughter's medical care at WVU Medicine Children's, Scarlett's three months in the NICU were filled with baby-step successes
That	that led to where she is today.
ay.	Today, Scarlett crawls and pulls herself
om ren's	to a standing position independently. Developmentally, she is on par with other babies her age. And she weighs 15
er	pounds – an incredible growth from when she was 1 pound 13.3 ounces.
	"My husband, Ronnie, and I love our care team at WVU Medicine Children's," Sydney said "We owe our daughter's
s. In	life to the amazing care Scarlett received
je 2 rder	from everyone in the NICU. I think about
that	experience could've been totally different
sed	if it wasn't for them. They made me feel
sed	moment because they took care of her just
6.	as I would have."

EXCEPTIONAL GENEROSITY



Walmart associates in Parkersburg love raising money for WVU Medicine Children's. Every year, they support the Hospital through special events such as classic car shows, bake sales, and bingo nights, as well as a "round-up" campaign at cash registers. In 2019, the store raised more than \$30,000 for Children's through these efforts. And while COVID-19 may have changed their plans, it didn't dampen their spirits.

"We take our commitment to Children's very seriously because the Hospital touches so many associates' lives," Karen Romero, e-commerce assistant manager at the Parkersburg Walmart, who leads the fundraising effort, said. "We know that many families need help paying their hospital bills or covering food and lodging for long-term hospital stays. It's a privilege to give money that helps out with things like that."

After the store canceled its 2020 fundraising events due to COVID-19, Romero and her team focused their energies on their annual "round up" campaign, in which customers add a donation to their amount due at the register. The store also accepted contributions from associates and collected coins at a wishing well near the entrance.

Every year, the store sent all funds collected to Children's Miracle Network Hospitals® (CMN), which raises money and awareness for 170 member hospitals across the United States and Canada. Walmart stores throughout West Virginia donate to CMN. "Some people don't realize that when they donate to CMN at a Walmart in our region, 100% of that donation goes to Children's," Cindy Liberatore, executive director of development at WVU Medicine Children's, said. "Walmart is one of many corporate partners that raises money for us through CMN. We've been part of CMN for 30 years. In 2019, CMN donations to our Hospital totaled \$2.5 million, which we used to support many of our programs."

Romero said that her store competes with Walmart stores in Vienna, WV, and Marietta, Ohio, to see which one can raise the most money each year. "People in our community are very supportive of Children's Miracle Network," she said. "They know how important WVU Medicine Children's is for their kids, grandkids, nieces, and nephews."



CMN STANDS FIRM IN ITS COMMITMENT TO SUPPORT CHILDREN'S HOSPITALS THROUGH THE PANDEMIC

COVID-19 has severely impacted fundraising for all hospitals in the Children's Miracle Network (CMN). Teri Nestel, president and CEO of CMN, discussed the challenges and opportunities ahead.

HOW WOULD YOU CHARACTERIZE THE IMPACT THAT COVID-19 IS HAVING ON CHILDREN'S **HOSPITALS FROM A FINANCIAL STANDPOINT?**

We surveyed our member hospitals early in the pandemic, and 67% of hospitals indicated they wouldn't be able to meet their needs without increases in donations due to a loss in funding because of the pandemic. We're continuing to talk with our member children's hospitals, and we anticipate additional impacts into 2021. We're so grateful to everyone who has continued to give and support Children's Miracle Network Hospitals this year. We know times are difficult for so many, but the funds raised this year have been critical to helping kids continue to receive the care they need.

WHY IS IT IMPORTANT FOR DONORS TO SUPPORT CMN INITIATIVES THAT FUND WVU MEDICINE CHILDREN'S CLINICAL **PROGRAMS AND SERVICES?**

Through our research, we know children's health is the most important charitable cause for most Americans. And CMN hospitals, including WVU Medicine Children's, are on the frontlines when it comes to protecting future generations. However, there is a significant funding gap in children's healthcare, which has only been exacerbated by

KTT

which we used to support many of our programs." Cindy Liberatore

EXCEPTIONAL GENEROSITY

the COVID-19 pandemic. When someone donates through a Children's Miracle Network Hospitals fundraiser, their donation goes directly to their local Children's Miracle Network Hospital. Those donations ensure we can close the funding gap and transform how we care for children not just today but throughout their lives.

WHAT WOULD YOU SAY TO PEOPLE WHO **CONTINUE TO GIVE SACRIFICIALLY TOWARD PROJECTS LIKE THE NEW CHILDREN'S HOSPITAL** THAT WVU MEDICINE IS BUILDING?

As always, first, thank you. We are so grateful for your support. It is so critical to ensuring the health of future generations. Expanding your local children's hospital's capacity is so vital to the community and the hospital's ability to serve its growing needs. Your gift also has impacts beyond your local community. Because we know that when one child's health issue is solved at one hospital, it has ramifications across the U.S. and even the world, saving more kids' lives. That's the power of a network like ours.

I am so looking forward to traveling again and eventually seeing the new children's hospital!

For more information on how you can support WVU Medicine Children's through CMN, visit WVUMedicine. ChildrensMiracleNetworkHospitals.org.



Cindy Liberatore Executive Director of Development at WVU Medicine Children's



Teri Nestel President and CEO of Children's Miracle Network

"In 2019, CMN donations to our Hospital totaled \$2.5 million,



Childrens.WVUMedicine.org