



# Children's National<sup>®</sup>

Medical Center

Children's National Medical Center  
Washington, D.C., USA

Committed to Children  
in the USA and Around  
the World





# Who We Are

## History

Children's National Medical Center, situated in the heart of Washington, D.C., is the country's third oldest non-profit pediatric hospital, and has been dutifully delivering novel treatment for the nation's sick children since 1870.

With a proud storied history, growing from its beginning as a 12-bed hospital to a 323-bed quaternary teaching pediatric medical center, Children's National today houses more than 600 dedicated pediatric physician experts across 60 specialties.

## Facilities

In addition to the main hospital, the Sheikh Zayed Campus for Advanced Children's Medicine, Children's National is home to numerous institutes that include the Sheikh Zayed Institute for Pediatric Surgical Innovation (SZI), the Brain Tumor Institute (BTI), the Children's National Heart Institute (CNHI) and the Gilbert Family Neurofibromatosis Institute, among others.

## Research

Research at Children's National is carried out at the Children's Research Institute (CRI), where more than 1,000 active clinical research projects are managed.

## Education

Children's National also serves as the primary pediatric teaching hospital for the George Washington University School of Medicine, and receives students from both Howard University College of Medicine and Georgetown University School of Medicine. All of Children's National medical faculty hold academic appointments at these schools, serving as the teachers for the next generation of pediatric physicians.

## Recognized Leaders in Pediatric Care



### A Top 5 Children's Hospital

One of the nation's Top 5 pediatric hospitals and, for the second year in a row, ranked No. 1 in new born care. It also ranked in all the specialties evaluated by U.S. News & World Report.



### Recognized for Quality & Safety

One of only two pediatric hospitals in the United States to be annually designated a Leapfrog Group Top Hospital for 8 years consecutively.



### Excellence in Nursing

Designated two times as a Magnet® hospital, a designation given to hospitals that demonstrate the highest standards of nursing and patient care delivery.



### Leaders in Research & Innovation

One of the top seven pediatric hospitals in the United States in National Institutes of Health (NIH) research funding, with more than 1,000 active clinical research projects underway at the Children's Research Institute (CRI).





# Accelerating medical solutions through pioneering research and innovative clinical applications

## Children's Research Institute

At the Children's Research Institute (CRI), new ground is broken every day in the field of pediatric medicine, across five integrated research centers: Cancer and Immunology, Genetics Medicine, Neuroscience, Translational Science and Pediatric Surgical Innovation.

More than 500 industry-leading research faculty at Children's National seek to combat some of childhood's most devastating diseases from every angle – harnessing technology, biology, and pharmacology to advance treatments, improve diagnostics and innovate cutting-edge healthcare solutions.

## Sheikh Zayed Institute for Pediatric Surgical Innovation

Children's National also houses the pioneering Sheikh Zayed Institute for Pediatric Surgical Innovation (SZI), which strives to transform pediatric surgical intervention by making surgery more precise, less invasive and pain free - with a focus on improved outcomes and less recovery time.

## Research Program Highlights



### Neonatal Laparoscopic Surgery

using a minimally invasive surgical technique, for infants born with a defect or abnormality, resulting in less pain and a shorter recovery period for the child.



### High-Intensity Focused Ultrasound (HIFU) for Pediatric Osteoid Osteoma

a precise and controlled method to destroy bone tumors with incisionless surgery.



# Cardiology



Charles Berul, M.D.  
Division Chief,  
Cardiology



Richard Jonas, M.D.  
Division Chief,  
Cardiac Surgery



A MULTIDISCIPLINARY  
TEAM FEATURING

42

BOARD-CERTIFIED  
CARDIOLOGISTS AND  
CARDIOVASCULAR  
SURGEONS

Ricardo Muñoz, M.D.  
Division Chief,  
Cardiac Critical  
Care Medicine



A SPECIALIZED,  
STATE-OF-THE-ART  
CARDIAC INTENSIVE CARE  
UNIT (ICU), FEATURING

26

CARDIAC  
CARE ROOMS



52

DEDICATED BEDS  
FOR CARDIOLOGY AND  
CARDIAC SURGERY  
INPATIENTS



MORE THAN

20,000

ECHOCARDIOGRAMS  
EVERY YEAR

INCLUDING  
NEARLY

3,000

FETAL  
ECHOCARDIOGRAMS

BOARD-CERTIFIED  
CRITICAL CARE  
SPECIALISTS

A BOARD-CERTIFIED  
ANESTHESIOLOGY  
TEAM DEDICATED  
EXCLUSIVELY TO  
PEDIATRIC CARDIAC  
PATIENTS



MORE THAN

600

SURGERIES  
EACH YEAR

INCLUDING

HEART  
TRANSPLANTS

MORE THAN

600

CARDIAC  
CATHETERIZATION  
PROCEDURES  
ANNUALLY



APPROXIMATELY

550

COMPLEX  
CONGENITAL  
RECONSTRUCTIVE  
PROCEDURES  
ANNUALLY



**Children's National Heart Institute (CNHI)** is consistently recognized among the best cardiology and cardiovascular surgery programs in the United States. The Institute features specialists with expertise in the full spectrum of pediatric heart care, treating even the most complex forms of congenital and acquired heart disease.

CNHI cares for thousands of patients every year, ranging from babies in the womb to adults with congenital heart defects.

## At the forefront of pediatric cardiac technology

Children's National offers the most sophisticated imaging techniques to provide intricately detailed pictures of the heart and its functions, leading to more accurate diagnosis and treatment; including echocardiography, cardiac MRI and our unique Interventional Cardiac MRI (ICMR) Program.

Pioneered at CNHI, the ICMR Program combines MRI and cardiac catheterization technologies, allowing the Institute's specialists to obtain detailed diagnostic images and perform cardiac catheterizations in the least invasive, safest way possible.

## Pioneering the way in congenital heart defect surgery

Children's National surgeons are internationally recognized experts in complex congenital heart surgery and early primary repair. The team of world-class surgeons have been responsible for pioneering some of the most innovative treatments and procedures in the field, leading to some of the best heart surgery outcomes in the nation.

More than two-thirds of surgeries at CNHI are performed on children less than one year old, and half of these are for newborns less than one month old – which requires the most advanced techniques and abilities. Children's National surgeons are committed to advancing surgical care for the smallest and sickest patients through groundbreaking research and cutting edge technological breakthroughs.

CNHI offers extensive interdisciplinary care in utero through the innovative Fetal Heart Program. CNHI also houses an elite Ventricular Assist Devices (VAD) Program, offering the next generation of lifesaving technology. Moreover, CNHI provides comprehensive care for children with heart failure through its Advanced Cardiac Therapies and Heart Transplant Program.

## Comprehensive cardiac care, from the womb to adulthood

The team at CNHI cares for children with congenital heart disease (CHD) from before birth through adulthood and all along the way. Advanced fetal cardiology experts diagnose cardiac anomalies during gestation and work with parents to ensure the best care after delivery.

Children's National also provides specialized care for adults with congenital heart disease through the Washington Adult Congenital Heart (WACH) Program, a collaborative partnership with MedStar Washington Hospital Center.



# Oncology



Jeffrey Dome,  
M.D., Ph.D.,  
Vice President,  
Center for Cancer  
and Blood Disorders



ATTENDING  
PHYSICIANS ARE  
BOARD-CERTIFIED  
IN PEDIATRIC  
ONCOLOGY/  
HEMATOLOGY

MORE THAN  
**50%**

OF NURSES ARE  
BOARD-CERTIFIED IN  
ONCOLOGY



MORE  
THAN  
**70**

ACTIVE CLINICAL  
ONCOLOGY  
STUDIES

**33**

DEDICATED INPATIENT  
**BEDS**  
FOR ONCOLOGY  
INPATIENTS



**11**

DEDICATED  
BLOOD AND MARROW  
TRANSPLANTATION (BMT)  
INPATIENT  
**BEDS**



THE LEUKEMIA/  
LYMPHOMA PROGRAM  
CURRENTLY DIAGNOSES  
MORE THAN

**50**

NEW CASES  
A YEAR

TREATS  
MORE THAN

**1,500**

PATIENTS  
ANNUALLY



MORE THAN

**485**

OPERATIONS FOR SOLID TUMOR  
TREATMENT ARE PERFORMED  
EVERY YEAR IN THE SOLID  
TUMOR PROGRAM

THE BRAIN TUMOR  
INSTITUTE EVALUATES  
MORE THAN

**100**

NEW PATIENTS  
ANNUALLY





The **Oncology Division at Children's National** is ranked among the top 7 pediatric cancer programs in the United States according to U.S. News & World Report, and cares for more than 250 newly diagnosed patients each year.

## Home to some of the world's leading pediatric oncology experts & researchers

Children's National is an established leader in pediatric cancer care and research, pioneering clinical treatment modalities for the hardest to treat cancers.

Oncology care is divided into specialized multidisciplinary clinical programs:

- Leukemia/Lymphoma Program
- Solid Tumor Program
- Cancer Genetics Program
- Blood and Marrow Transplantation Program
- Brain Tumor Institute (Neuro-Oncology Program)
- Experimental Therapeutics Program
- Radiation Oncology Program

## State-of-the-art radiation oncology services

Through a partnership with John Hopkins Medicine, Children's National patients have access to leading-edge radiation therapy at a newly renovated, child-friendly space, located only 15 minutes away from the main Children's National campus. The Radiation Oncology Program provides clinically integrated pediatric oncology services to both inpatients and outpatients through a seamless admission process.

At the cutting edge of pediatric radiation therapy, Children's National, in collaboration with Sibley Memorial Hospital (Johns Hopkins Medicine), is building a dedicated proton beam therapy center. Proton beam therapy uses advanced technology to deliver treatments that are more precise. This allows physicians to access tumors in hard-to-reach areas while sparing surrounding healthy tissue.

## Breaking new ground in pediatric cancer care

Children's National is one of only 21 Phase I member organizations in the prestigious National Cancer Institute's Children's Oncology Group (COG) - the largest global association of more than 200 pediatric research hospitals.

Moreover, Children's National was one of the founding members of the Pediatric Brain Tumor Consortium (PBTC), a National Institutes of Health (NIH) funded consortium consisting of 11 full member institutions.

Children's National houses an elite Experimental Therapeutics Program for patients with recurrent and resistant cancers, offering exclusive access to Phase 1 and 2 clinical trials only available at a select few academic medical centers across the United States. Children's National also leads in developing its own clinical trials of novel agents including T-cell therapy and high intensity focused ultrasound (HIFU).



## Dedicated world-class pediatric bone marrow transplant treatments

The Blood and Marrow Transplantation (BMT) Program at Children's National is one of the only dedicated pediatric bone marrow transplant programs in the United States. Accredited by the Children's Oncology Group (COG), the program is renowned for its cutting-edge treatment protocols, developed by a team of dedicated bone marrow transplant specialists.

As a participating center in the NIH-funded BMT Clinical Trials Network, Children's National provides patients with access to national clinical trials and novel treatments - such as extracorporeal photopheresis, a treatment that helps children who experience dangerous post-transplant complications. Children's National is also home to one of only a handful of programs worldwide offering cellular therapy.

Physicians at Children's National have pioneered the use of autologous transplants for patients with hard-to-treat brain tumors. Researchers at Children's National are also currently working on the "SUN Trial", which is studying the use of a Sickle transplant Using Nonmyeloablative (SUN) approach to perform BMT with no chemotherapy in children.

## Delivering advanced care for the rarest blood disorders

The Division of Hematology at Children's National is one of the largest pediatric hematology programs in the United States, providing specialized, multi-disciplinary care to pediatric patients from around the world.

Treating more than 1,400 children annually, Children's National houses one of the largest sickle cell programs in the country, offering groundbreaking solutions for patients with all types of sickle cell diseases.

Children's National is one of the first pediatric hospitals to offer sickle cell disease patients a chance at a cure with Haploidentical Hematopoietic Stem Cell Transplantation. Through this process of bone marrow transplantation, physicians can effectively cure this often-debilitating disease.

Additionally, the Comprehensive Hemophilia and Thrombosis Center at Children's National treats nearly 300 children and teens with bleeding, clotting, and platelet disorders each year, using advanced treatments, such as minimally invasive clot busting technology.







# Neurology



ONE OF THE  
**LARGEST**  
PEDIATRIC  
NEUROSCIENCE  
TEAMS IN THE  
UNITED STATES

Roger Packer, M.D.,  
Senior Vice President,  
Center for Neuroscience  
& Behavioral Health



A DEDICATED  
**NEURO  
INTENSIVE**  
CARE UNIT  
(NEURO ICU)



**54**  
DEDICATED BEDS  
FOR THE NEONATAL  
NEUROCRITICAL  
CARE PROGRAM SERVING  
THE LEVEL IV NEONATAL  
INTENSIVE CARE UNIT  
(NICU)



**HUNDREDS**  
OF NEUROSURGICAL  
PROCEDURES  
EVERY YEAR

MORE THAN  
**8,000**  
EPILEPSY-RELATED  
PATIENT VISITS



THE GILBERT  
FAMILY  
NEUROFIBROMATOSIS  
INSTITUTE CARES FOR OVER  
**1,000**  
PATIENTS  
ANNUALLY

THE COMPREHENSIVE  
PEDIATRIC EPILEPSY  
PROGRAM TREATS NEARLY

**400**  
CHILDREN WITH  
NEWLY DIAGNOSED  
SEIZURES



AROUND  
**50**  
EPILEPSY SURGICAL  
PROCEDURES  
PERFORMED  
EACH YEAR

THE MOVEMENT  
DISORDERS PROGRAM  
EVALUATES AND TREATS  
MORE THAN

**500**  
CHILDREN  
EACH YEAR



THE CRANIOFACIAL  
PROGRAM TREATS  
MORE THAN  
**400**  
CHILDREN  
ANNUALLY



Integrated within one of the largest neuroscience centers in the United States, the **Divisions of Neurology and Neurosurgery at Children's National** are ranked amongst the top 5 nationwide by U.S. News & World Report.

Neurologists at Children's National treat thousands of patients each year, caring for children with a range of neurological conditions: from the common to the most complex and critical.

At Children's National, cutting-edge research and highly specialized clinical care is combined to provide one of the most comprehensive pediatric neuroscience programs in the world, which includes the following sub-specialties:

- Brain Tumor Institute (Neuro-Oncology Program)
- Developmental Pediatrics and Neurogenetics
- Neurology
- Epilepsy, Neurophysiology, and Critical Care Neurology
- The Gilbert Family Neurofibromatosis Institute
- Neuropsychology

## Recognized leaders in minimally invasive neurosurgery

One of the most active pediatric neurosurgery programs in the country, the Children's National Division of Neurosurgery offers the most sophisticated imaging and treatment technologies, to ensure the most precise, effective and minimally invasive procedures possible.

The Division of Neurology and Neurosurgery at Children's National is one of only two fully integrated pediatric programs in the United States to utilize deep brain stimulation (DBS) to treat children with movement disorders and intractable epilepsy. Children's National is also a leader in the use of Intraoperative MRI and Visualase® MRI-guided Laser Ablation for minimally invasive treatment of complex brain tumors.

## Pioneering excellence in treatment of neurofibromatosis

The Gilbert Family Neurofibromatosis Institute at Children's National is leading the way in the diagnosis, evaluation, and treatment of children and adults with the full range of conditions associated with neurofibromatosis type 1 and type 2.

The Institute is one of the largest of its kind in the world and is designated a Neurofibromatosis Center of Excellence by the Childhood Tumor Foundation. The Neurofibromatosis Institute has been chosen as one of eight initial programs in the United States to participate in the Neurofibromatosis Clinical Trials Consortium, allowing patients access to cutting-edge modalities and potential new treatments.





## Specialized Diagnosis and Treatment for Rare Diseases

- Children's National is a world leader in urea cycle disorders, and proudly leads the Rare Disease Clinical Research Center for Urea Cycle Disorders.
- The Lysosomal Storage Disorders Program has cared for pediatric and adult patients since 1990, and is one of the largest programs of its kind in the United States.
- The Inherited Metabolic Disorders Program is one of the largest specialized programs in the country, featuring dedicated metabolic dietitians.
- The Myelin Disorders Program is a national leader in providing comprehensive clinical care, diagnostic testing and advanced treatments for children with even the most complicated myelin disorders.



**Marshall Summar, M.D.,**  
Division Chief, Genetics  
and Metabolism



## At the forefront of the treatment of rare disease

With more than 8,500 visits annually and 12 genetics specialists, the **Division of Genetics and Metabolism at Children's National** is one of the largest clinical genetics program in the world.

Children's National has become a noted international destination for the treatment of some of the rarest genetic disorders and is acknowledged as a leader in treating metabolic diseases. At Children's National, you will find advanced technologies and innovative treatments, ensuring every child receives the best possible care.

The division's multidisciplinary team of experts provides diagnostic evaluation and clinical care to children and adults with birth defects, genetic disorders and inborn errors of metabolism. Additionally, the Cancer Genetics Program provides genetic counseling services for families with a history of a known genetic disorder and recurrence risk counseling for parents of a child with an inherited condition.

Nearly every geneticist at Children's National is involved in research, working on developing groundbreaking technologies, devices and treatments for patients with genetic diseases – focusing on finding safe, effective options for conditions that have no existing treatments.

## Advanced genetic testing for accurate, definitive diagnosis

An accurate diagnosis is the first step in each child's care. In addition to offering the most advanced molecular testing available today, experts at Children's National do not stop until they reach a definitive diagnosis for each child. In fact, the Division of Genetics and Metabolism has one of the highest diagnostic rates for rare conditions in the United States.

Using one small blood or tissue sample, Children's National geneticists are able to determine a child's risk for inherited medical conditions, as well as predict how a child might respond to certain medications.



## Nursing Excellence

Children's National nurses exemplify compassion, commitment and connection across the organization to provide world-class care. As a Magnet®-designated organization, these nurses are leaders in the provision of excellent nursing care across the continuum. Children's National nurses commit to the care of children and their families, improve patient outcomes, and link research and science to the evidence-based care they provide. The Children's National professional practice model serves as a strong foundation for its nursing practice and reflects a commitment to its guiding principle of patient- and family-centered care.

Nurses at Children's National demonstrate collaborative partnerships as an important component in advancing care; and collaborate with patients and families, interprofessional colleagues, members of the community, government and external organizations to advocate and advance health and well-being.

Nurses engage in shared decision-making to advance care and value professional development as a means toward world-class care. Children's National nurses achieve advanced education degrees, as well as extensive specialty professional certifications, and are well-positioned to lead evidence-based and innovative improvements in safe, high-quality patient care.

MORE THAN  
**18,000**  
NURSES

**89%**  
CLINICAL NURSES  
WITH A BACHELOR'S  
DEGREE OR HIGHER  
IN NURSING

**52%**  
ELIGIBLE CLINICAL  
NURSES CERTIFIED  
BY A NATIONALLY OR  
INTERNATIONALLY  
RECOGNIZED  
PROFESSIONAL  
ORGANIZATION

**60%**  
LEADERSHIP  
NURSES CERTIFIED  
BY A NATIONALLY OR  
INTERNATIONALLY  
RECOGNIZED  
PROFESSIONAL  
ORGANIZATION



**100%**  
NURSES IN LEADERSHIP  
POSITIONS WITH A  
BACHELOR'S DEGREE OR  
HIGHER IN NURSING



## Nursing Awards

**Magnet®:** Children's National has been a Magnet®-designated hospital since 2010. This designation is given to hospitals that provide safe, high quality care and attract the most talented nurses. Fewer than 7 percent of hospitals in the United States receive this designation, and even less pediatric hospitals.

**2017 Beacon Award for Excellence™:** In July 2017, the Surgical Care Unit (SCU) received the prestigious Gold Status Beacon Award for Excellence from the American Association of Critical Care Nurses (AACN). The Beacon Award is given to individual units in recognition of their ability to demonstrate improvements in all facets of patient care. The award recognizes nursing excellence and the achievement of exemplary outcomes by the SCU nursing care team. Children's National is the first hospital in the United States to receive a Beacon Award for Excellence in three critical care units and two acute care units.

**Pediatric Nursing Certification Board Recognition:** Children's National received special recognition from the Pediatric Nursing Certification Board (PNCB), which is the largest nonprofit organization for pediatric nursing and offers international certification exams. The PNCB recognized Children's National as having over 500 Certified Pediatric Nurses (CPN) on staff in 2017. Only three other health systems across the country have met this milestone.



E 2



# Global Services Division

## Serving the World

Facilitating the treatment journey for international patients and families for over two decades, Children's National has been privileged to welcome thousands of patients and families seeking pediatric medical care from around the world.

The **Children's National Global Services Division** features a multilingual professional team, ready to provide families with the highest level of dedicated support to manage medical services and all related needs, at every step of the treatment journey – striving to make the family's stay at Children's National as pleasant and comfortable as possible.

Well-versed in the diverse linguistic, cultural and religious needs of many different countries, the Global Services team focuses on bridging the cultural gaps and helping families feel more at home.

Children's National also maintains in-country liaisons in **Peru, Abu Dhabi, United Arab Emirates (UAE)** and **Kuwait**.

### The Global Services Clinical Support team is comprised of:

- Dedicated Medical Director
- Clinical Manager
- Advanced Practice Nurse Practitioner
- Patient Care Coordinators

### The Global Services team assists patients in navigating every aspect of their visit and treatment, including:

- Second opinions
- Navigating the visa process
- Air ambulance coordination
- Coordinating with embassies in Washington, D.C.
- Appointment scheduling
- Spiritual support for all faiths
- Medical consultations
- Discharge planning and return home clinical coordination
- Air and ground transportation/travel planning/hotel or longer term housing options
- Acquiring medical equipment
- Interpretation services

Global Services staff are available to answer your calls, faxes and emails between the hours of 8 a.m. and 5 p.m. Eastern Standard Time (EST), Monday to Friday (except during US Holidays). For urgent needs after-hours, an on-call Global Services representative is available 24 hours.

## Fostering connections with medical communities around the world

Through clinical partnerships, educational collaborations and research affiliations, Children's National creates opportunities for the sharing of knowledge and best practices in pediatric health care with medical communities around the world. Children's National specialists regularly travel the globe to take part in clinical exchange programs and international medical symposia. Additionally, continuing professional development clinical rotations are available for physicians interested in spending 1-4 weeks on the Children's National campus.

The Global Services Division specializes in meeting the needs of physicians who may be interested in learning more about services at Children's National, from patient referrals and second opinions, to education and training opportunities.



## Virtual care: extending our expertise beyond borders

Children's National is continually creating easier, more convenient ways to access quality care.

Led by internationally renowned cardiac intensivist Ricardo Muñoz, M.D., the Virtual Care Program allows physicians from around the world to connect with Children's National specialists through state-of-the-art electronic and telecommunications technologies.

The Virtual Care team at Children's National is ready to bring world-class care and education to communities around the world, looking to support other pediatric care providers in a shared vision of helping children by:

- Providing accessible care in a timely manner
- Supporting the local health care economy and community providers
- Offering highly specialized health care expertise not commonly available in smaller communities
- Serving as a cost feasible educational health care resource

### For our international partnering providers, we offer the following services:

- Live video visits (urgent and non-urgent)
- Second opinion
- Provider-to-provider phone consultations (urgent and non-urgent)
- Store and forward (dermatology, wounds)
- Chart review
- Virtual grand rounds
- Mobile services
- Distance learning and education (clinical/ medical education, mentoring)





**Children's  
National**  
*Medical Center*

The Nation's Children's Hospital

**The Sheikh Zayed Campus  
for Advanced Children's Medicine**



**323**  
BEDS

**219,000**  
PATIENTS

**15,700**  
INPATIENTS  
VISITS



**669,413**  
OUTPATIENTS

MORE THAN

**50**  
LEVEL IV  
INTENSIVE CARE  
BEDS



**610**  
PHYSICIANS



**123,911**  
DIAGNOSTIC  
IMAGING  
PROCEDURES



MORE THAN  
**1,895**  
NURSES



**17,535**  
SURGICAL  
PROCEDURES



**1,250,870**  
LABORATORY  
TESTS

**2,000**  
PATIENTS

SOUGHT CARE AT THE  
GLOBAL SERVICES  
PROGRAM



FROM  
**25**  
COUNTRIES AROUND  
THE WORLD

## Contact us

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Annual volumes based on  
statistics from fiscal year 2018