

Augusta Health

Fishersville

AugustaHealth.com, 540-332-4000

For the past five consecutive years, Augusta Health has been nationally recognized by HealthGrades as one of America's 50 Best Hospitals for clinical excellence and patient safety. At Augusta Health's Center for Cancer and Blood Disorders, every cancer patient is connected with a navigator to guide the patient and their family through the treatment process. Navigators act as a resource, cheerleader, support system, and translator from diagnosis through cancer treatment. Patients with congestive heart failure can also seek treatment at Augusta's new Congestive Heart Failure Clinic, which works to provide patients with the best treatment and quality of life.

Bon Secours Mary Immaculate Hospital

Newport News

BonSecours.com, 757-886-6000

Dr. Anthony Carter at Bon Secours Mary Immaculate Hospital is the first surgeon in Hampton Roads to perform the total anterior hip replacement. One of his surgeries was live streamed to the Anterior Hip Foundation conference in Las Vegas, educating 100 surgeons in the technique. As a Bariatric Surgery Center of Excellence, Bon Secours Mary Immaculate Hospital is also a market leader in bariatrics. More than 99 percent of bariatric surgeries at the hospital are minimally invasive, granting patients less scarring and quicker recovery times. The hospital is also home to a Level III NICU.

Bon Secours Memorial Regional Medical Center

Mechanicsville

BonSecours.com, 804-764-6000

The Surgical Review Corporation recently named Bon Secours Memorial Regional Medical Center a Center of Excellence in Hernia Surgery. The center specializes in robotic minimally invasive surgery, which heals quicker and is less painful for the patient than more invasive surgeries. Memorial Regional Medical Center is one of the first in the country to achieve this accreditation.

Bon Secours St. Francis Medical Center

Midlothian

BonSecours.com, 804-594-7300

Bon Secours St. Francis Medical Center recently opened the first cardiac rehabilitation center in Chesterfield County. The center provides quality cardiac care to patients with heart disease, or those recovering from a heart attack or heart surgery. Site work is additionally underway for a new three-story ambulatory surgery center and medical office building on campus. The medical center plans to expand even further with the addition of 55 acute care beds. This 110,000-square-foot expansion will cost approximately \$119 million.

Carilion Children's Hospital

Roanoke

CarilionClinic.org, 540-266-5437

Carilion Children's Hospital was recently designated a Level I Pediatric Trauma Center, the only such center in western Virginia. The hospital also opened a new playroom called Hannah's Place, in memory of 15-year-old Hannah George who died with her father in a car wreck. Hannah's father was a doctor at Carilion Children's Hospital, and Hannah's mother hopes the playroom will help children heal and feel like themselves again. The colorful playroom has murals, rooms for each age group, and a medical play area where children can process their experiences at the hospital.

Carilion Roanoke Memorial Hospital

Roanoke

CarilionClinic.org, 540-981-7000

A study conducted by the National Cardiogenic Shock Initiative shows that people with cardiogenic shock survive their heart attack at significantly higher rates when treated with a protocol offered at Carilion Roanoke Memorial Hospital. The hospital was one of 65 other hospitals participating in the study. 75 percent of patients in the study with cardiogenic shock survived their heart attack when treated with the protocol, which involves inserting a straw-sized pump by catheter into the groin to the heart to keep blood pumping. Carilion Roanoke Memorial is also home to the region's first pediatric emergency department.

Carilion Stonewall Jackson Hospital

Lexington

CarilionClinic.org, 540-458-3300

Patients not quite strong enough to go home can take advantage of the Swing Bed program at Carilion Stonewall Jackson Hospital. The program is ideal for those who do not need hands-on physician care but still require skilled nursing or rehab prior to independent function. Physical and occupational therapy, lab access, and 24-hour emergency care are just a few of the services offered through the Swing Bed program. Carilion Stonewall Jackson Hospital was also recently approved to perform lithotripsies, which use ultrasound technology to treat kidney stones.

Centra Bedford Memorial Hospital

Bedford

CentraHealth.com, 540-586-2441

Bedford Memorial expanded its emergency department to include a dedicated emergency entrance separate from the main entrance and an additional 2,000 square feet of space to expand 14 treatment rooms and add two specialized rooms for mental health patients. The hospital's campus additionally boasts the Oakwood Health & Rehabilitation Center that provides care for patients unable to receive treatment at home.

Chesapeake Regional Medical Center

Chesapeake

ChesapeakeRegional.com, 757-312-8121

Last spring, Chesapeake Regional Medical Center released the world's first fully robotic catheterization lab. The center is the first in Virginia to launch a vascular robotic program and perform a robotic-assisted percutaneous coronary intervention, which was completed by medical director Ronald McKechnie in March.

Children's Hospital of Richmond at VCU

Richmond

CHRichmond.org, 804-828-2467

The Children's Hospital of Richmond at VCU is the only center in the region that offers EOS imaging for children. This low-dose, highly sophisticated X-ray imaging technology is used to scan children with scoliosis and other conditions that require regular scanning. EOS exposes children to 50 percent less radiation than other X-ray technologies, and the scan takes only 10 to 20 seconds to complete. In February, the Children's Hospital also revealed plans to build an 86-bed, \$350 million children's hospital that will replace the existing inpatient pediatric unit at VCU's Main Hospital. Construction is expected to wrap up by the end of 2022.

Good Genes



Wearing a yellow-flowered dress, 3-month-old Kaeli Price (pictured here with her mother Kelli Price and her physician, Dr. Crystal Proud) became the first patient in the state to receive Zolgensma, the first gene therapy for a neuromuscular disease, after its FDA approval. The infant received the therapy—which is administered in a single infusion—in June at Children's Hospital of the King's Daughters in Norfolk.

Zolgensma treats spinal muscular atrophy, which causes progressive muscle weakness throughout the body. In the recent past, most infants with Price's condition would die from respiratory failure before they reached the age of 2.

"This gene therapy treatment has given new hope to families of children with this devastating disease," says Proud, a pediatric neuromuscular neurologist at CHKD. "Kaeli is already showing signs of improvement. Her cry has become stronger, she's holding her head up, she's holding toys in her hands and kicking her legs." CHKD.org

Children's Hospital of the King's Daughters

Norfolk

CHKD.org, 757-668-7000

This September, the Children's Hospital of The King's Daughters broke ground for a new \$224 million mental health facility. The 14-story facility will have 60 inpatient psychiatric beds, along with comprehensive treatment programs. About 400 healthcare providers—psychiatrists, licensed clinical social workers, therapists, and more—will support this expansive mental health initiative, not just at the new facility, but throughout the CHKD system. The new facility, expected to open in 2022, will help fill a critical gap in the growing need for pediatric mental health services throughout the region.

Chippenham Hospital

Richmond

ChippenhamMed.com, 804-483-0000

In April, surgeons at Chippenham Hospital performed the first total knee replacement in the U.S. using the latest robotic technology. The new Rosa Knee Robotic System uses 2D X-rays to create a 3D model of the patient's knee, which doctors use to develop a precise surgical plan they are able to execute with the help of a robotic arm. Chippenham is proud to be the first hospital in the country to offer this new technology.

Fauquier Hospital

Warrenton

FauquierHealth.org, 540-316-5000

With a \$12.5 million investment from LifePoint Health, Fauquier Hospital has nearly finished its new cancer center, set to open in December of this year. The Fauquier Health Center for Cancer Care is 25,650 square feet and will feature hematology and oncology clinics, infusion centers, and lab services. Additionally, Fauquier Hospital's Heart and Vascular Center recently opened a cardiac catheterization lab, through which cardiologists can perform a variety of complex diagnostic procedures while getting a clear look at the inner workings of a patient's heart.

Henrico Doctors' Hospital

Richmond

HenricoDoctors.com, 804-289-4500

The Sarah Cannon Cancer Institute at Henrico Doctors' Hospital is one of the first cancer centers in Virginia to use the new SAVI SCOUT system, a wireless radar localization system that can locate tumors inside breast tissue within one millimeter of accuracy. Also at Henrico Doctors' is the Virginia Transplant Center, which uses the latest technology to perform kidney transplants, including minimally invasive laparoscopic surgery, which reduces pain and recovery time.

Inova Alexandria Hospital

Alexandria

Inova.org, 703-504-3000

Inova Alexandria Hospital recently invested \$5.2 million in its Women's Tower, the purpose of which is to provide a space solely dedicated to the pre- and post-birthing experience, as well as post-breast and gynecological surgery patients. Renovations include additional examination rooms, an expanded waiting area, patient room renovations, a new Labor & Delivery Post-Anesthesia Care Unit, and a Women's Specialty Center for post-surgical care. The hospital also launched a Drug Take Back Program, encouraging patients to return unused prescriptions to avoid inappropriate access by others.

Inova Children's Hospital

Falls Church

InovaChildrens.org, 855-694-6682

The Craniofacial Program at Inova Children's Hospital specializes in treating children with craniofacial conditions, such as cleft lips and palates. The program's team includes a number of specialists in plastic and reconstructive surgery, pediatric neurosurgery, and pediatric dentistry, among many others. The American Cleft Palate-Craniofacial Association approved the program as a Craniofacial and Cleft Palate Team. The hospital's neuroscience program combines the skills of the hospital itself with those of the Inova Neuroscience Institute, and specializes in pediatric neurology and pediatric neurosurgery.

Inova Fair Oaks Hospital

Fairfax

Inova.org, 703-391-3600

The nationally recognized bariatric program at Inova Fair Oaks Hospital is a fully accredited Comprehensive Center for Bariatric Surgery whose surgeons have performed more than 8,000 procedures. All surgery options are minimally invasive, and most are performed laparoscopically in order to ensure the most comfort for patients before, during, and after surgery. The program also offers nutritional counseling with registered dietitians, exercise classes, and support groups for patients. For those who do not want surgery, the hospital offers a 12-week, non-surgical weight loss program.

Inova Fairfax Hospital

Falls Church

Inova.org, 703-776-4001

Inova Fairfax Hospital's Women's Hospital is the fifth most popular in the United States and is the only dedicated women's hospital in Northern Virginia. Additionally, Inova Fairfax Hospital is the only Level I trauma center in Northern Virginia, a designation the hospital has received from the state since 1981. The hospital is also the flagship location of the Inova Heart and Vascular Institute, the region's only dedicated cardiac hospital. Physicians there have seen a significant increase in survival rates from those being treated for cardiogenic shock since switching to a more team-based approach to treatment. Their multidisciplinary Shock Team is on call 24 hours a day, 7 days a week for patients.

Inova Loudoun Hospital

Loudoun

Inova.org, 703-858-6000

In 2018, Inova Loudoun Hospital opened the Ladies Board Birthing Inn and the Natural Birth Center, two birth centers that offer personalized and private birthing experiences, including hospital-based natural birth. Other aspects of the birthing centers include wireless fetal monitors, 24/7 in-house anesthesiology, a Level IIIA neonatal intensive care unit, and free consultations with the hospital's Birth Navigator. In addition, Inova Loudoun Hospital is Loudoun County's only designated trauma center, verified by the state in 2018. Renovations are currently underway at the Inova Virts Miller Family Emergency and Trauma Center to create a more efficient emergency room experience.

Inova Mount Vernon Hospital

Alexandria

Inova.org, 703-664-7000

The Inova Wound Healing Center finds its home at Inova Mount Vernon Hospital and is the region's largest and most experienced of its kind. The Dorothea R. Fisher Wound Healing Center treats a number of chronic, non-healing wounds, including diabetic ulcers, on an outpatient basis. The wound-healing team uses the latest technology in order to provide its patients with the most effective care possible, such as hyperbaric oxygen therapy (HBO), which is used to treat conditions that require increased oxygen flow to body tissue. In addition to Inova's two other wound healing centers, the health system treats more than 18,000 patients per year.

Back to Life



Albemarle County resident Kim Durland, 57, (pictured here in Machu Picchu) underwent a complex spine surgery after 10 years of increasingly debilitating pain and limited mobility.

Dr. Chun-Po Yen, a neurosurgeon with the UVA Spine Center in Charlottesville, determined Durland had adult degenerative scoliosis, and first recommended a course of physical therapy. But after an episode of acute pain left her unable to walk, he decided that it was time for her to go under the knife. Yen led the successful surgery in February 2017, which included removing herniated discs and bone spurs and fusing her spine from T10, near the lungs, to the iliac region just above the pelvis.

Durland's recovery required seven months of physical therapy. By October 2018, she and her husband, Michael, took a trip to Peru, including a hike to the ancient city of Machu Picchu. Even though "it's very steep and there are steps everywhere, I felt good," she says. "I felt and continue to feel so incredibly grateful that I've had such a positive outcome from such a complex surgery." UVAHealth.com

John Randolph Medical Center

Hopewell

JohnRandolphMedicalCenter.com, 804-541-1600

In 2017, John Randolph Medical Center opened a Behavioral Health Military Annex, an eight-bed complex for military service members and their families that offers treatment for post-traumatic stress disorder (PTSD), depression, anxiety, and other mental health issues. Additional treatment options include individual, group, and family therapy. The hospital also provides behavioral health services for non-military service members, such as a partial hospitalization program, outpatient programs for substance abuse, an inpatient behavioral health unit for adults, and assessment and referral services.

Johnston-Willis Hospital

Richmond

JohnstonWillisMed.com, 804-483-5000

In June, Johnston-Willis Hospital performed the first Woven EndoBridge (WEB) device implantation in Central Virginia. The WEB is a low-risk surgical option designed to treat brain aneurysms. The device is made of wire mesh and, when inserted into the aneurysm, acts as a plug to reduce blood flow and prevent further bleeding. The surgeon who implanted the device is neurovascular specialist Efstathios Spinos, a graduate of the University of South Florida College of Medicine.

Lake Taylor Transitional Care Hospital

Norfolk

LakeTaylor.org, 757-461-5001

Lake Taylor Transitional Care Hospital recently purchased new state-of-the-art multi-function ventilators, making it one of the first primary care hospitals in Virginia to own such equipment. The ventilators are five-in-one respiratory systems that offer ventilation, oxygen, suction, cough assist, and nebulization. Last year, in partnership with the Eastern Virginia Medical School, the hospital hired a Consultative Palliative Medical Care Director to lead a Supportive Care Team, the goal of which is to support patients suffering from serious chronic and complex illnesses.

LewisGale Hospital—Montgomery

Blacksburg

LewisGale.com, 540-951-1111

In May, LewisGale Montgomery Hospital became the first in Virginia to provide a new state-of-the-art knee replacement surgery that is CT-free and robotics-assisted. John Velyvis, the surgeon who performed this surgery, has performed more than 1,000 robotics-assisted surgeries throughout the country in the last ten years. The robotics-assisted system allows for increased accuracy and precision, fewer complications, decreased recovery time, and increased patient mobility.

LewisGale Hospital—Pulaski

Pulaski

LewisGale.com, 540-994-8100

A new 16-bed behavioral health facility opened at the hospital in late August. Transitions Behavioral Health provides support for individuals struggling with mental health, substance abuse, and dual diagnosis disorders. When a patient's stay is over, they are given a comprehensive plan, which includes resources and providers in the community to help maintain the progress they have made at the facility. In addition to these services, LewisGale Pulaski is home to the only certified lymphedema therapists in the region, helping to combat the chronic swelling condition that impacts more than 10 million Americans.

Mary Washington Hospital

Fredericksburg

MaryWashingtonHealthcare.com, 540-741-1100

Cardiology patients in need of surgery at Mary Washington Hospital are wheeled into the hospital's Cardiac Hybrid Room, an operating room designed specifically for transcatheter aortic valve replacement (TAVR) procedures and equipped with operating equipment and imaging technology. Specialists are a part of the Structural Heart & Valve Clinic Team, which reviews patients' diagnoses and determines the best treatment plans available. In response to the high quality of cardiovascular care, IBM Watson Health named the hospital one of the Top 50 Cardiovascular Hospitals in November 2018.

Parham Doctors' Hospital

Richmond

ParhamDoctors.com, 804-747-5600

This year, HealthGrades named Parham Doctors' as one of the Top 100 Hospitals for Orthopedic Surgery and Joint Replacement for the third year in a row, with spinal surgery as one of its specialties. Typical procedures include using bioabsorbable spinal implant devices for short-term correction and spinal tissue regeneration. It was also the first in central Virginia to perform cervical artificial disc replacement. The hospital also offers MAKOpasty Technology, which allows for robotic-arm assisted knee-replacement surgeries.

Reston Hospital Center

Reston

RestonHospital.com, 703-689-9000

At Reston Hospital Center, the robotic surgery department is considered to be one of the most robust in the mid-Atlantic. Home to four high-tech robots, the hospital offers spine, weight loss, and orthopedic surgery. Surgeons visit the hospital to learn on these machines, since the hospital is only one of eight Visiting Clinicians Programs in the U.S. Reston Hospital Center also announced a partnership with Children's National Health System in Washington, D.C., ranked number one in the nation for neonatology.

Retreat Doctors' Hospital

Richmond

RetreatDoctors.com, 804-254-5100

Home to a state-of-the-art Center for Urology, Retreat Doctors' Hospital was recognized by HealthGrades as a Top 100 Hospital for Prostate Surgery. This year, the hospital became the first in Virginia to use the da Vinci Single Port SP, a robot that performs minimally invasive urological surgeries. Drs. Blake Moore and Tim Bradford removed a patient's prostate with the technology, which only requires a single incision. Patients experience faster recovery times and less risk of infection.

Riverside Doctors' Hospital

Williamsburg

RiversideOnline.com, 757-585-2200

For geriatric patients, Riverside Doctors' Hospital recently became the first in Virginia to earn Geriatric Emergency Department Accreditation from the American College of Emergency Physicians. The hospital also has a Crisis Intervention Team and Assessment Center open 12 hours per day. Police bring individuals experiencing behavioral health crises to the center to prevent them from being improperly incarcerated due to mental illness, and the center provides the patient care from a specialist as quickly as possible.

Rising Up



In May, Carilion Clinic announced more than \$300 million in expansion plans for Carilion Roanoke Memorial Hospital. The additions will include a new Crystal Spring Tower built on the site of the city's former tennis courts that will offer several floors of parking, an expanded emergency department with 95 beds and a 40-bed observation unit, and six to seven floors of dedicated space for Carilion's Cardiovascular Institute. An additional 550-space parking garage, along with a new Behavioral Health Building with a separate emergency room for psychiatric patients and an interior courtyard, are also in the works. Construction will take about five years to complete.

"This project will address many of the needs our community has told us about," says Steve Arner, chief operating officer for Carilion Clinic and president and CEO of Carilion Medical Center. The expansion will add approximately 400,000 square feet to the medical center. Once complete, Carilion Roanoke Memorial Hospital will have 2.4 million square feet, making it one of the largest hospitals in Virginia. *CarilionClinic.org*

Riverside Regional Medical Center

Newport News

RiversideOnline.com, 757-594-2000

The hospital's new Cardiac and Vascular Hybrid Operating Room is a multi-purpose space where surgeons can perform diagnostic, interventional, and surgical procedures without switching to different rooms and breaking the sterile environment. The 1,000-square-foot space is twice the size of a normal operating room and is the first of its kind on the peninsula. Equipped with robotic imaging technology, the new operating room allows for more complex surgeries, like the WATCHMAN procedure, a device that is inserted in the left atrial appendage for patients with atrial fibrillation. The hospital started performing this surgery in the new operating room in the spring.

Riverside Rehabilitation Hospital

Yorktown

RiversideOnline.com, 757-272-0300

In July, the new Riverside Rehabilitation Hospital in York County opened as the only freestanding rehabilitation hospital in the Hampton Roads region. The 52,000-square-foot facility holds up to 50 patients and employs more than 200 administrative and clinical professionals to assist patients with various health issues, ranging from brain injuries to orthopedic conditions. A therapy gym with an overhead suspension walking track and an Activities of Daily Living suite with a full kitchen, bed, and laundry room are just a few examples of the new hospital's innovative offerings.

Sentara CarePlex Hospital

Hampton

Sentara.com, 757-736-1000

Sentara CarePlex's new TrueBeam Radiotherapy System uses stereotactic radiosurgery to target cancerous tumors with a laser beam, treating the affected area more precisely. The system can also treat hard to reach or specific spots, like brain tumors. These services are offered as a part of the Sentara Cancer Network in all Sentara hospitals. Additionally, Sentara CarePlex will now offer a 24/7 hand specialty center with fellowship-trained hand surgeons on-call to assist with emergency injuries, thanks to a continued partnership with Tidewater Orthopaedics. The two organizations also work together to offer a freestanding orthopedic ambulatory surgery center on the CarePlex campus.

Sentara Halifax Regional Hospital

South Boston

Sentara.com, 434-517-3100

As part of the hospital's Community Needs Health Assessment, diabetes and metabolic diseases are regularly one of the greatest medical concerns in the rural area. Janet Durham, NP, recently received certification from Duke University's Endocrinology Program, the first class of its kind. With this education, she has been able to provide better in-office patient care and education for diabetes and metabolic education, as well as outreach efforts. The hospital gives about 200 free A1C screenings at various events throughout the year, in addition to Durham's new efforts, such as giving away free blood sugar meters and portion control plates. Since receiving her certification, the rural area has seen an increase in patients eager to receive care from Durham.

Sentara Leigh Hospital

Norfolk

Sentara.com, 757-621-6000

At the Orthopedic Hospital at Sentara Leigh, patients with orthopedic needs can find a wide array of services. The hospital offers quality care for hand, foot, and ankle concerns, as well as comprehensive care in their OrthoJoint center, specifically for patients with knee or hip concerns. The new Express Track option allows patients to have their joint replacement surgery in the morning and return home as early as that evening or the next day. Therapy starts the same day as surgery in an effort to get patients on the right track towards healing.

Sentara Martha Jefferson Hospital

Charlottesville

Sentara.com, 434-654-7000

In July, Sentara Martha Jefferson announced a partnership with Blue Ridge Area Interventional Neuroradiology (BRAIN) to treat stroke patients and other neurointerventional radiology patients. The team of Dr. John Gaughen, Dr. Lee Jensen, and Dr. Andrew DeNardo will provide expert neurological care to stroke patients as part of BRAIN. Since 2015, the hospital has led the charge on innovation in stroke care, including the establishment of their helipad to reduce transport times between other hospitals for stroke patients and allow for faster treatment times at the hospital. This work led to Sentara Martha Jefferson to be the first hospital in the country designated as a Primary Plus Stroke Center by DNV-GL Healthcare.

Sentara Norfolk General Hospital

Norfolk

Sentara.com, 757-388-3000

In 2018, the heart transplant team at Sentara Norfolk General Hospital began using the Sherpa Pak cardiac transport system by Paragonix Technologies. The Sherpa Pak is designed to prevent damage to donated hearts by supplying a temperature-controlled environment during transport to hospitals. The system allows Sentara surgeons to monitor heart temperature through an app during transportation to ensure preservation. The hospital is also the only Level I trauma center in the area with the help of Nightingale Regional Air Ambulances used to assist in emergency transportation and en route care.

Sentara Obici Hospital

Suffolk

Sentara.com, 757-934-4000

In 2017, Sentara Obici Hospital launched a new program to help drug-dependent newborns suffering from Neonatal Abstinence Syndrome (NAS) in the NICU. Nurses and volunteers for "Arms of Love" console NAS babies as they go through withdrawal from drugs they were exposed to in the womb. NAS babies experience body shakes, fussiness, and poor feeding, among other symptoms, after birth. Babies within this program are swaddled in loving arms in private, dimly lit nurseries to help them through the drug withdrawal process.

Sentara Princess Anne Hospital

Virginia Beach

Sentara.com, 757-507-1000

Sentara Princess Anne Hospital is the first Virginia hospital to offer the Ornish Medicine Program for Reversing Heart Disease to cardiac patients. The nine-week program introduces a plant-based diet and lifestyle changes to reverse the advancement of coronary artery disease and other serious heart conditions. The program has efficiently helped 99 percent of participating patients stop or reverse their heart disease and improve blood flow by 300 percent. Dr. Dean Ornish is the founder of the program and a clinical professor of medicine at the University of California.

Sheltering Arms Physical Rehabilitation Hospital

Mechanicsville

ShelteringArms.com, 804-764-1000

Sheltering Arms Physical Rehabilitation Hospital and Virginia Commonwealth University Health are partnering together to build a new rehabilitation hospital in West Creek. The new Sheltering Arms Institute will be a 114-bed destination hospital designed to help patients recovering from strokes, brain and spinal cord injuries, and various neurological diseases and disorders. Patients at the Sheltering Arms Institute will have access to clinical care, research, and advanced technology. The hospital is scheduled to be completed in the summer of 2020.

Doubling Up



VCU Pharmaceutical Engineering directors
Thomas Roper and
Sandro da Rocha.

The VCU Center for Pharmaceutical Engineering and Sciences, a joint venture between the university's School of Pharmacy and College of Engineering, opened in April. The center will facilitate multidisciplinary research and the development of new drug products.

One area of focus is nanomedicine, a new and rapidly evolving field that combines nanotechnology with biomedical and pharmaceutical sciences. These types of drugs are embedded into miniscule frameworks that allow for more control over the medicine's delivery.

"We are excited that the Center for Pharmaceutical Engineering and Sciences will work with researchers and industry partners to discover and deliver health products that improve and save lives," says Dr. Joseph DiPiro, dean of the School of Pharmacy.

In conjunction with the center, VCU will also be home to the nation's first Ph.D. program in pharmaceutical engineering, with the first class to start in fall 2020. Students will take part in the new product creation, from pre-clinical studies to manufacturing and packaging. *PharmEgr.VCU.edu*



Sovah Health

Martinsville

MartinsvilleHospital.com, 276-666-7200

The cancer care program at Sovah Health in Martinsville focuses on every aspect of cancer, from prevention to rehabilitation. The Ravenel Cancer Center introduced the TrueBeam Radiotherapy System to provide a more convenient radiation oncology treatment for cancer patients through shorter radiation sessions. The Julius Hermes Breast Care Center at Sovah Health in Martinsville has also gained 3D mammography services to help patients detect breast cancer more effectively with high-performing scans. The hospital is accredited by the American College of Surgeons' Commission on Cancer.

Spotsylvania Regional Medical Center

Fredericksburg

SpotsRMC.com, 540-498-4000

Spotsylvania Regional Medical Center's obstetrics program has 10 private labor, delivery, recovery, and postpartum rooms. Women are able to labor and deliver in the same room. The hospital offers a variety of birth plans, including midwifery care with wireless heart rate monitoring. SRMC also offers the curved compression 3D mammography, a new technology that is able to capture breast tissue layer by layer.

University of Virginia Children's Hospital

Charlottesville

Childrens.UVAHealth.com, 434-243-5500

This year, surgeons at the University of Virginia Children's Hospital performed complex open-heart surgery on the smallest patient in history. An infant received mitral valve replacement using the Melody valve, a substitute pulmonary heart valve. Surgeons were able to modify the Melody valve to achieve a successful surgery. Researchers at UVA School of Medicine are also making efforts in part with the National Institute of Health's Autism Centers of Excellence Program to understand how autism-spectrum disorders (ASD) differentiate in boys and girls.

University of Virginia Medical Center

Charlottesville

UVAHealth.com, 434-924-0000

The UVA Cancer Center in 2019 performed their 500th stem cell transplant. The center performs autologous transplants, which use stem cells from a patient's blood or bone marrow, and allogeneic transplants, using stem cells from a donor's blood or bone marrow. The stem cell transplant program is accredited by the Federation for Accreditation of Cell Therapy and approved by the National Marrow Donor Program, known as the Be The Match donation program.

VCU Health Community Memorial Hospital

La Crosse

VCUHealth.org, 434-447-3151

The Virginia Commonwealth University Health Community Memorial Hospital and Massey Cancer Center have partnered together to create the Solari Radiation Therapy Center, the only radiation therapy center in southern Virginia. The Solari Radiation Therapy Center provides medical and radiation oncology services with the latest technology. The center's CT Simulator helps to determine problem areas and helps doctors create a treatment plan, while the RapidArc delivers the correct dosage of radiation therapy at the targeted location.

VCU Health Massey Cancer Center

Richmond

Massey.VCU.edu, 804-828-0450

In 2018, the Virginia Commonwealth University Health Massey Cancer Center was the first cancer care provider in Virginia to offer adult patients with B-cell lymphoma a FDA-approved CAR T-cell therapy, which reprograms the immune system to attack cancer cells. Additionally, doctors are leading the development of a global breast cancer clinical trial called KATHERINE to reduce the risk of HER2-positive breast cancer. The hospital has been awarded millions of dollars in grants from the National Cancer Institute. Massey is also home to the state's largest bone marrow transplant program, which is celebrating its 30th anniversary this year.

VCU Medical Center

Richmond

VCUHealth.org, 804-828-9000

Researchers at Virginia Commonwealth University Medical Center are developing a small ankle device that might help Parkinson's patients walk. By sending vibrations to the ankle and foot, the device helps to generate movement for patients experiencing issues with walking and balance. VCU has also made efforts to help stop the opioid epidemic in Virginia by monitoring painkiller prescriptions more closely, and testing a vaccine that generates anti-opioid antibodies. VCU's Health Network has also launched Project ECHO, a telehealth program that gives health professionals new approaches to treat people addicted to opioids.

Virginia Hospital Center

Arlington

VirginiaHospitalCenter.com, 703-558-5000

In February, Dr. David Duhamel at the Virginia Hospital Center was the first surgeon in the metro area to perform the Zephyr Valve procedure for patients suffering from severe Chronic Obstructive Pulmonary Disease (COPD) and emphysema. During this procedure, small valves are placed in airways to block off damaged areas of the lungs, allowing healthier areas to expand and take in more air. The Zephyr Valve procedure is the first minimally invasive procedure to aid lung function and help patients breathe easier.

Winchester Medical Center

Winchester

ValleyHealthLink.com, 540-536-8000

This year, surgeons at Winchester Medical Center have been performing minimally invasive surgery with the da Vinci Xi Surgical System. Dr. Rodolfo Oviedo is the first within the area to perform a bariatric procedure and an abdominal wall reconstruction with a robotic assistant. Surgeons have also performed single-site robotic assisted gallbladder removal with only one incision. In 2018, the hospital enrolled a patient in the ReChord Trial to treat degenerative mitral valve regurgitation through a small incision while the heart is beating. WMC and Valley Health have made efforts to combat addiction, advocate for Medicaid expansion, and offer opportunities for Virginia students to explore careers in healthcare and medicine.

Wythe County Community Hospital

Wytheville

WCCH.org, 276-228-0200

Wythe County Community Hospital has added two new inpatient dialysis rooms in the past year and has been working to employ a new Kidney Stone Clinic to help prevent, diagnose, and treat kidney stones for residents in the area. The hospital has also added a Heartburn Center Program to help patients suffering from gastroesophageal reflux disease (GERD), Barrett's esophagus, hiatal hernia, and other swallowing disorders. The program will allow patients to stay locally to have a Nissen procedure, designed to decrease the amount of acid in the stomach.

Getting Real

NoPregnancyIsPerfect.com

what if my baby shows up earlier than expected?



Seven HCA Virginia hospitals are taking part in a "No Pregnancy Is Perfect" campaign, designed to address top pregnancy questions, including those many parents-to-be are too embarrassed to ask.

"How did you survive the first three months?" "Did you have body issues during your pregnancy?" "What was sex like during pregnancy?" are some of the questions answered by parents on YouTube videos found on the campaign's website. By entering their zip code, users can hear the answers to these questions and others, along with personal stories, from new parents in their area. There is also an interactive Alexa skill, 40 Weeks, that responds to questions.

"The 'No Pregnancy is Perfect' campaign provides the opportunity for moms-to-be to connect with other moms when they most need a support system," says Kim Jarrelle, chief nursing officer of HCA Virginia's Spotsylvania Regional Medical Center. "We are empowering new moms with encouragement and knowledge as they begin this exciting chapter of their lives." *NoPregnancyIsPerfect.com*