
RWJBarnabas HEALTH
SPRING 2025
healthy together
CANCER CARE
A NEW ERA
SAFER PREGNANCIES
STOP DISEASE
IN ITS TRACKS
GROUNDBREAKING
ALZHEIMER'S CARE
Heart Health
THE POWER OF AI

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SPRING 2025

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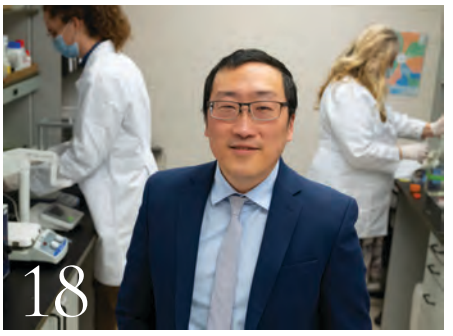
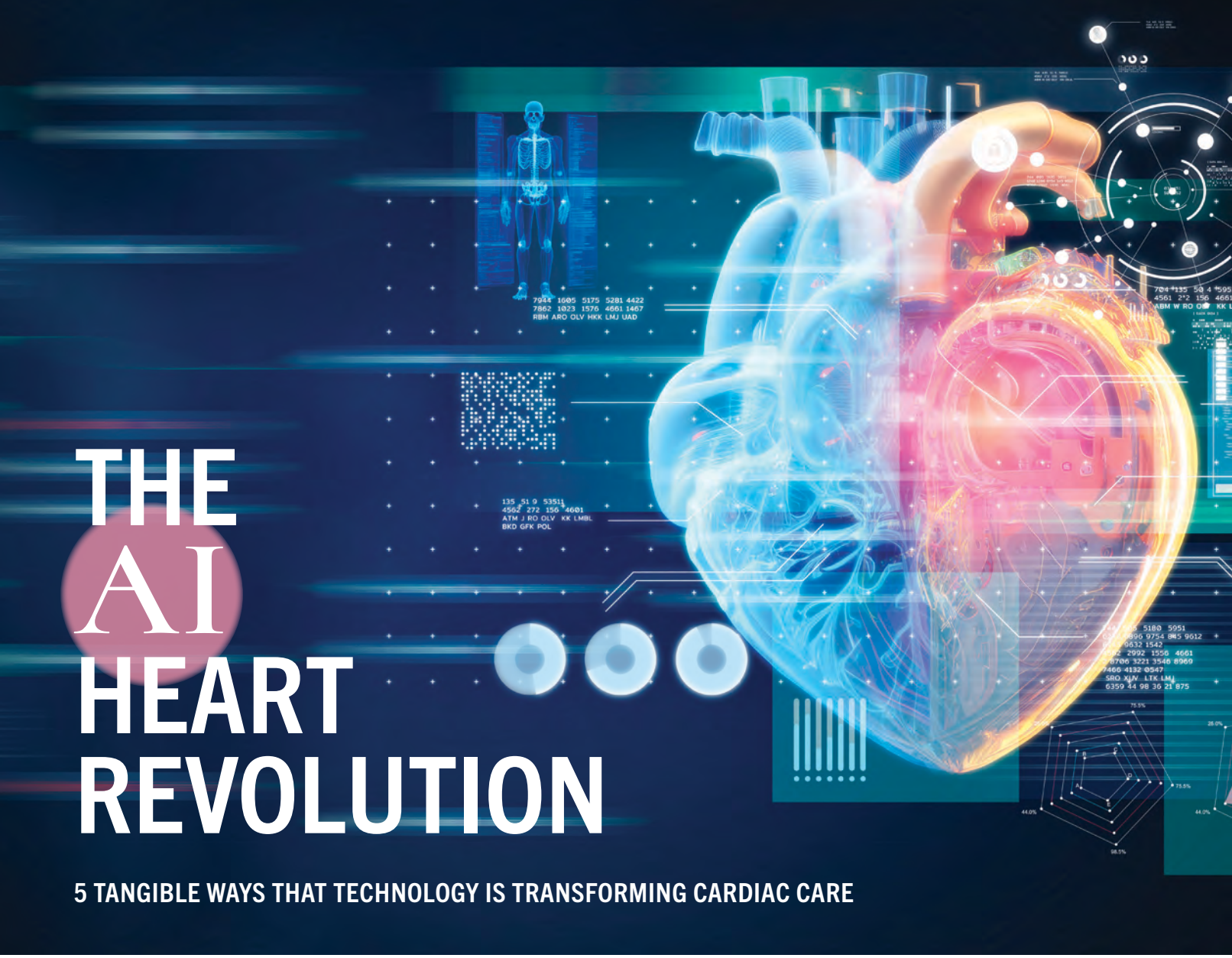




THE AI HEART REVOLUTION

5 TANGIBLE WAYS THAT TECHNOLOGY IS TRANSFORMING CARDIAC CARE

Heart disease remains the leading cause of death for both men and women, but emerging technologies like artificial intelligence (AI) are creating substantial opportunities for a healthier future.

"Similar to the way genomics has advanced cancer care, the emergence of AI is allowing cardiologists to reimagine everything we know about how the heart works and how we care for it," says Partho Sengupta, MD, Chief of Cardiology, Robert Wood Johnson University Hospital (RWJUH); Henry Rutgers Professor of Cardiology and Chief of Cardiovascular Medicine, Rutgers Robert Wood Johnson Medical School; and a member of RWJBarnabas Health (RWJBH) Medical Group.

PARTHO SENGUPTA, MD

Dr. Sengupta has a front-row seat for this technological revolution. He's co-leader of the Center for Innovation at RWJUH, a pioneering initiative focused on research-based development, testing and implementation of digital solutions that can improve care throughout the RWJBH system.

"While AI is a major focus, I prefer to define AI as 'augmented intelligence,'" Dr. Sengupta says. "That's because we will never use AI to replace doctors, nurses and caregivers. Instead, we'll use it to augment their work."

Dr. Sengupta and his team are using or evaluating technologies that promise to deliver key benefits to heart patients, including:

1 FINDING THREATS SOONER

AI allows doctors to more quickly identify structural heart defects, find symptoms of heart failure and detect evidence of heart attacks.

Medical teams accomplish this in part through different types of imaging, using AI-driven algorithms and deep learning capabilities to view X-rays, ultrasounds, CT (computed tomography) scans and

MRIs (magnetic resonance imaging scans) of the heart.

"With imaging techniques, doctors can perform a greater variety of standardized measurements within heart images, which helps predict heart disease sooner," Dr. Sengupta says. "This gives us a huge opportunity to care for heart conditions before they become more serious."

In some cases, improved imaging helps doctors prevent emergencies. By using AI in a type of scan called fractional flow reserve CT, for example, doctors create a highly accurate, 3D model of a patient's coronary arteries that can both detect blockages and assess their significance. Information from this technology has already led some patients back from the brink of a heart attack.

On the horizon: Doctors may use AI to augment the interpretation of subtle changes in EKGs (electrocardiograms) as a screening tool, potentially for early detection of heart disease, even predicting when heartbeats could become irregular (arrhythmias).

2 ANALYZING IMAGES

Researchers are exploring ways that large amounts of data from advanced imaging combined with machine learning can analyze pixels of cardiac images that might otherwise be invisible to doctors. This capability to analyze pixel-level information, called radiomics, trains AI algorithms to detect subtle patterns that indicate the presence of certain heart conditions.

"For example, cardiac ultrasounds, CT scans and MRIs give us images in 256 shades of gray, but the human eye can't see all those shades," Dr. Sengupta says. "Radiomics could enhance information related to gray-level distributions, potentially enabling us to indicate the presence of scar tissue or damaged heart muscle more precisely."

3 BOOSTING SAFETY

AI can serve as a double check for physicians and other heart care professionals, enhancing accuracy when diagnosing and treating complex conditions.

One example is detecting aortic stenosis, a narrowing of the aortic valve. "It's a complicated presentation that can be missed on EKGs," Dr. Sengupta says. "AI could develop alerts that automatically detect stenosis and flag it."

Similarly, natural language processing, a type of AI that allows computers to understand human commands, could be used to help review medical records and notify doctors about underlying health conditions that factor into a patient's care. As a result, providers could develop more personalized and safer treatment plans.

Also under review are solutions that integrate AI into remote patient monitoring. These tools provide continuous observation, transmit key vital signs to providers and flag anomalies, helping patients go home from the hospital sooner and achieve a faster, safer recovery.

4 SIMPLIFYING CARE

Technology is bringing efficiencies directly to patients. For example, some RWJBH outpatient cardiology practices use pocket ultrasound, a technology that allows doctors to see heart images on an iPhone during a patient visit, enabling physicians to offer immediate guidance on cardiac health.

Researchers are also investigating whether technology can help ultrasounds better identify dead heart tissue that indicates a heart attack. "If successful, this could allow more people to get ultrasounds in the office and receive appropriate referral for MRI, while reducing unnecessary tests in many," Dr. Sengupta says.

Similarly, RWJBH researchers are looking into the use of handheld infrared devices that can see through the surface of the skin and identify molecules that indicate the presence of a blocked artery. "By detecting conditions like this quickly, we can get patients to the ER faster," Dr. Sengupta says.

5 IMPROVING OFFICE VISITS

The doctor-patient relationship is at the center of successful heart care, and AI is helping providers spend more face time with patients. Advances such as automated dictation can free physicians from manual documentation tasks, allowing them to look less at a computer screen during office visits and spend more time delivering detailed health guidance and coaching.

"By using technology to make providers more efficient, doctors can create more meaningful conversations with patients, building empathy and trust," Dr. Sengupta says. "As a result, patients get a better experience and doctors can perform more critical thinking and problem-solving—the tasks that make them feel more fulfilled."

A NEW ERA FOR CANCER CARE

NEW JERSEY'S FIRST FREESTANDING CANCER HOSPITAL WILL BE 'TRANSFORMATIONAL' WHEN OPEN THIS SPRING.

For many people in New Jersey, cancer is distressingly familiar. "Over 50,000 of our residents are diagnosed with cancer each year, and New Jersey ranks sixth in cancer incidence in the U.S.," says Steven Libutti, MD, FACS, the William N. Hait Director of Rutgers Cancer Institute and Senior Vice President of Oncology Services at RWJBarnabas Health (RWJBH). "Cancer is a big problem in our state."

Now RWJBH, together with Rutgers Cancer Institute—the state's only NCI-designated Comprehensive Cancer Center—is on the cusp of opening New Jersey's first freestanding cancer hospital. Called the Jack & Sheryl Morris Cancer Center, the new facility in New Brunswick is a landmark development for cancer care throughout the region.

The state-of-the-art 12-story, 520,000-square-foot center, named for philanthropist Jack Morris and his wife, Sheryl, is slated to open this spring. It will provide cutting-edge, comprehensive cancer diagnosis, research, treatment and support services all under one roof and promises to reshape the patient experience for countless families touched by potentially life-threatening illness.

"Opening the Morris Cancer Center is going to be transformational," Dr. Libutti says. "Only a handful of similar facilities exist nationwide."

PUTTING PATIENTS FIRST

Key to the vision for the center is its concentration of services in a single

building. "We're providing a place and environment where experts together are focusing entirely on cancer and the patient experience," Dr. Libutti says.

Each stage of the patient's cancer journey, whether inpatient or outpatient, will be addressed on-site, from early diagnosis through treatment and survivorship. Services available within a few elevator stops will include imaging, surgery, radiation oncology, medical oncology, chemotherapy, clinical trials and highly specialized advanced treatments such as cellular therapies, along with layers of support services.

Having all services together makes care convenient for patients, minimizes travel and eases navigation through often complex treatments. "Making care more efficient is better for the patient experience and promises to improve outcomes," Dr. Libutti says.

Dozens of nurse navigators will guide patients through their journeys, offering a main point of contact and a knowledgeable bridge to diverse providers.

Concentrating services will also promote collaboration by multidisciplinary teams that include not only clinicians but also researchers conducting groundbreaking clinical trials and research in state-of-the-art laboratories.

"Hallway conversations can help lead to new therapies," Dr. Libutti says. "We'll have easy sharing of information and ideas about ways to attack cancer's vulnerabilities." The fusion of top-notch facilities, advanced expertise and innovative treatment further promises to attract even more world-class physicians.

Patient-first priorities steered the center's conception, design and construction. "There was a lot of conversation about what the cancer journey looks like for patients and how to coordinate touchpoints along the way," Dr. Libutti says.


STEVEN LIBUTTI, MD, FACS

That meant more than having an advanced physical facility. "We also wanted the best workflows and practices to make the patient experience as efficient as possible," says Susan Solometo, Senior Vice President of Administration, Oncology Services, at RWJBH. "We're striving to optimize everything around the patient."

FORM AND FUNCTION

The blending of sophisticated design and efficient function will be evident upon stepping through the center's doors. "The building itself promotes processes we want to implement to make things easier for patients," Dr. Libutti says.

For example, patients using the MyChart electronic medical records portal can complete much of their registration before coming to an appointment. "When patients arrive, this will allow check-in and printing of a pass at a kiosk similar to those at airports," Solometo says. "Patients who return frequently for treatments won't have to go through an elaborate check-in and registration process every time."

An advisory council of patients and families contributed insights on matters from the organization of the building and floors to workflows, amenities and even furniture and finishings.

In addition to new infrastructure such as nine operating rooms and an additional 10 research laboratories, the center will include a demonstration kitchen, a physical therapy gym and adjacent parking. Space is allocated for integrative medicine services such as Reiki and art, music and pet therapies. A boutique area will include services for styling wigs or hair, buying lymphedema garments and getting a manicure and pedicure.

The building's soaring atrium will include design elements such as a staircase styled like a cancer ribbon and art/media installations. "There will be a calming aspect to entering the building," Solometo says. "Our hope is that patients may, even for a moment, forget why they're there."

Learn more about the Jack & Sheryl Morris Cancer Center at www.cinj.org/themorris.

A STATEWIDE VISION

The new Jack & Sheryl Morris Cancer Center anchors a broader strategic vision for cancer care throughout New Jersey. "Cancer doesn't travel well," says Steven Libutti, MD, FACS, the William N. Hait Director of Rutgers Cancer Institute and Senior Vice President of Oncology Services at RWJBarnabas Health (RWJBH). "Patients do better when they have services and support close to home. Our goal is that no person in New Jersey will be more than 15 minutes from an access point for our exceptional, comprehensive cancer care."

Contributing to that goal will be the new Melchiorre Cancer Center at Cooperman Barnabas Medical Center in Livingston, due for completion in late 2025, and the Specialty and Cancer Care Center at the Vogel Medical Campus in Tinton Falls, due to open in late 2026.

"Our investment in campuses that are strategically positioned throughout the RWJBH system is unprecedented and unparalleled," Dr. Libutti says. "We're committed to addressing cancer across the spectrum and easing the burdens for patients."

A BREATH OF FRESH AIR

AN INNOVATIVE SURGERY ALLOWS A CHILD WITH A LIFE-THREATENING DISORDER TO BREATHE ON HIS OWN.

Yvette Barnett-Somers of Essex County was elated when she found out she was pregnant with her second child in 2019. "I'd planned for him," says Yvette, who already had a 13-year-old daughter, Brianna.

Yvette had been under the care of an infertility specialist at Newark Beth Israel Medical Center (NBI), where she worked as a certified surgical technologist. "I had genetic testing and all my ultrasounds," she says. "Everything came back great."

Her due date was April 21, 2020. But 25 weeks into her pregnancy, her water broke. She was hospitalized at NBI for 12 days before giving birth to her son, Bryce Chance Somers, on January 21, at just 27 weeks.

"He weighed only 2 pounds, 2 ounces," says Yvette. "He was a peanut."

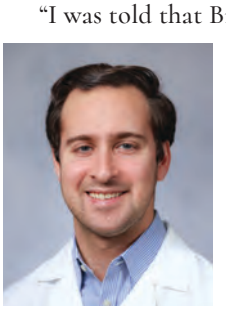
After being born premature, Bryce was intubated in the neonatal intensive care unit (NICU) at Children's Hospital of New Jersey (CHoNJ) at NBI, part of the Children's Health network at RWJBarnabas Health. His lungs collapsed several times. Doctors worried that something even more serious might be wrong. "He was floppy," Yvette says. "He wasn't able to suck, and he was very limp."

Tests probed the cause, and the neonatology team—concerned because of what the symptoms might mean—discovered that Bryce had Prader-Willi syndrome, a rare and complex genetic disorder marked by physical, mental and behavioral difficulties.

LIVING LIFE, WITH HELP

Key features of Prader-Willi syndrome include hyperphagia, or an incessant and insatiable hunger; hypotonia, or poor muscle tone; distinct facial features; a poor sucking reflex; poor responsiveness; and certain forms of physical underdevelopment.

"I was told that Bryce would never be able to live independently, drive or have children, and he would not be able to get off of the ventilator," Yvette recalls.


BRIAN MANZI, MD

Bryce remained in the NICU

Bryce Chance Somers, born with a rare genetic condition, has made significant progress since a highly specialized surgery allowed the removal of a breathing tube he'd had most of his life.

and, at 4½ months, as the COVID-19 pandemic was raging, underwent surgery in which he was given a tracheostomy—sometimes referred to as a trach—and a feeding tube called a G-tube.

After the procedure, Bryce was transferred to Children's Specialized Hospital (CSH) in New Brunswick. Both CSH and CHoNJ are part of the Children's Health network at RWJBarnabas Health. "The whole staff is truly amazing," says Yvette. "I lived at CSH with Bryce, and they taught me how to care for him—how to bathe him, suction and change the trach, perform trach CPR and administer his medications through the G-tube."

Initially on full ventilator support, Bryce was gradually weaned off this assistance. "Eventually, he went home with just a trach," Yvette says.

When Bryce was released, Yvette needed to continue working—but at a job that would allow her to care for Bryce. NBI's human resources department reassigned her to a receptionist role that would be more flexible than her previous surgical position. "I am so grateful to them," Yvette says.

A SCARE—THEN HOPE

At first, Bryce's life at home went as well as could be expected. But in summer 2022, Yvette was helping her daughter, Brianna, prepare for her sweet-16 party when Bryce suddenly stopped breathing.

Yvette began CPR while Brianna called 911. Bryce was taken by ambulance to CHoNJ and admitted into the pediatric intensive care unit (PICU). "I didn't think he would make it," Yvette says. "While he was in the hospital, I got a heart tattoo in the same place as his trach, as a symbol of my love for him."

Bryce continued to have intermittent successes and struggles over the next two years. By spring 2024, he'd had eight surgeries in his short life. But he was also well enough to undergo a milestone, innovative procedure that held out a seemingly impossible promise—that he might breathe without assistance.

"Without this procedure, Bryce would've had to live his life with his trach," says Yvette.

It would be only the second time the complex and highly specialized surgery, called a laryngotracheal reconstruction (LTR), had been performed at CHoNJ. Pediatric otolaryngologist Brian Manzi, MD, performed the six-hour surgery on May 9.

"This procedure requires a highly skilled team encompassing coordination between specialized pediatric anesthesiologists and pediatric otolaryngologists to share and repair the airway intraoperatively, as well as high-level neonatal and pediatric intensive care units to manage the pre- and post-care," Dr. Manzi says. "The surgery itself entailed removing the diseased portion of Bryce's windpipe and replacing it with a thumb-size length of cartilage from a right rib."

After his surgery, Bryce stayed at CHoNJ until June 4, then transferred to CSH for several weeks of rehabilitation. "Bryce's rib cartilage will regrow," says Dr. Manzi. "Now his airway is completely open, and he is breathing on his own without obstructions."

By the time he was discharged, Bryce was also sitting independently, bearing weight and walking.

Bryce made an impression on CSH caregivers. "I worked with Bryce when he was a tiny baby in a big crib, with so much equipment," says Charli Nobles, a child life specialist at CSH. "And I was working with him when he walked himself right out of our hospital."

Yvette considers his successful surgery and impressive recovery nothing short of a miracle. "He wouldn't be here without God, prayers and the talented and amazing teams at CHoNJ and CSH," she says.

January 21 marked Bryce's fifth birthday—"and his first birthday trach-free," says Yvette. The guest list for a birthday party included members of his numerous medical teams over the years.

"I'm so thankful for them," says Yvette. "Without them, there would be no Bryce."

To learn more about the Children's Health network at RWJBarnabas Health, visit **www.rwjbh.org/childrenshealth.**

PREGNANCY AND YOUR HEART

NATURAL BODILY CHANGES CAN BOOST CARDIAC RISKS. HERE'S WHAT TO DO ABOUT IT.

During pregnancy, it's natural and important to focus on your baby's health, but it's just as important to focus on your own health.

KIMBERLY SKELDING, MD

Complications that can arise as your baby develops don't just affect your well-being while pregnant. They can also have long-term effects that may boost future risks of developing serious conditions, especially heart disease.

"Pregnancy can be seen as a stress test on a woman's heart and circulatory system," says Kimberly Skelding, MD, Division Chief of Cardiovascular Services at Jersey City Medical Center and a member of RWJBarnabas Health Medical Group. "Significant changes occur in the body that put extra strain on the heart. Most moms won't have any problems, but even some healthy

women can experience heart problems or complications related to pregnancy that increase cardiac risks down the road."

WHAT RAISES RISKS

Bodily changes during gestation generally occur for healthy reasons. For example, pregnancy boosts the blood's propensity to clot, which protects against significant bleeding after delivery. Blood flow increases by 30 to 50 percent, and the heart pumps twice as hard to nourish the growing baby. Such changes often go away after the baby is born.

But common, serious complications during pregnancy that were once largely assumed to become harmless after birth have been linked to lasting and potentially dangerous heart risks. When biological shifts skew toward disorders, they can jeopardize health postpartum (after delivery)—possibly even years later.

One such complication is preeclampsia, a form of hypertension (high blood pressure) that often develops in the second half of pregnancy or after birth. Preeclampsia is marked by elevated blood pressure along with high levels of protein in urine and impaired function of small blood vessels throughout the body. Untreated, it can harm the baby and lead to serious, even life-threatening, organ malfunctions in the mother.

Another common complication is gestational diabetes, a condition in which hormonal changes elevate blood glucose (sugar). High blood sugar often dissipates after childbirth, but having gestational diabetes boosts your risks of later having Type 2 diabetes and heart disease.

Gestational diabetes and preeclampsia, along with other types of hypertensive disorders during pregnancy, are on the rise. Later cardiovascular conditions that are strongly linked to these complications include hypertension, heart attack, heart failure, stroke and peripheral vascular disease. Risks are especially high for non-Hispanic Black women.

Heart problems are a bigger concern than many women realize. "Heart disease kills more women than all cancers combined," Dr. Skelding says. "What's more, women with heart trouble have worse short-term and long-term outcomes than men." Women often delay seeking care for cardiac symptoms, which can manifest differently than in men, and doctors can sometimes be slower to test and diagnose women. Any delays can result in more heart muscle damage.

HOW TO STAY HEALTHIER

Certain factors that contribute to complications during pregnancy can't be controlled. For example, women are more prone to develop problems such as preeclampsia and gestational diabetes with age.

But many risk factors and conditions can be modified, treated or controlled through lifestyle changes or medications. Here are some key ways to keep your heart and blood vessels healthy during pregnancy and beyond.

• Take your history into account.

Greater awareness of risks is the first step toward minimizing them. Women with preexisting heart disease may experience worsening of their condition and have more severe signs and symptoms during pregnancy, labor, delivery and beyond.

"Mothers who have preexisting heart disease, hypertension or diabetes in pregnancy are at higher risk of developing hypertension and diabetes following their pregnancy and should be managing those conditions during pregnancy," says Dr. Skelding. "It's also important to discuss with your obstetrical team if you had any complications during a previous pregnancy."

• Be alert to signs of trouble.

Changes in body function are normal during pregnancy, but let your doctor know right away if you experience any symptoms associated with cardiovascular problems, especially if symptoms are severe.

Red flags include sudden swelling of feet, hands, ankles or arms; lightheadedness or fainting; unusual fatigue; chest pain; extremely fast heart rate; shortness of breath; persistent coughing; an increased need to urinate at night; or sleep difficulties.

• Practice healthy habits.

Abstaining from alcohol and smoking are two important ways to reduce risks. But in addition to avoiding harms, take positive steps to build better health.

Eat a heart-healthy diet rich in vegetables, fruits and whole grains, and nutrients such as protein and healthy fats. Exercise under your doctor's supervision to help strengthen your heart, improve cholesterol balance, manage blood sugar, control blood pressure and make progress toward any weight-reduction goals. Strive to reduce stress with measures such as physical activity, mindfulness or relaxation techniques, adequate sleep and socializing with other people.

Continue practicing these healthy habits after the baby is born.

• Get screened.

To assess heart risks, your doctor will take a careful medical history, review your symptoms and perform a physical examination. But you may need further tests to find out how a heart condition is affecting your pregnancy. These might include an echocardiogram, which uses ultrasound to look inside the heart, and/or an EKG (electrocardiogram), which measures electrical activity during your heartbeat.

If your obstetrician recommends you see a cardiologist, be sure to follow up right away, and keep visiting all the specialists on your medical team throughout your pregnancy and postpartum years.

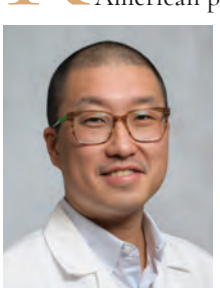
To learn more about comprehensive women's health services available through RWJBarnabas Health, visit **www.rwjbh.org/womenshealth**.

Ruth Tyroler is back on her feet with her dog, Luna, after having a bad fall down stairs at her home.

FIXING A HIP FRACTURE

HAVING HIP REPLACEMENT SURGERY AFTER A DOG-RELATED FALL LEAVES A WOMAN'S JOINT BETTER THAN EVER.

Ruth Tyroler of Hoboken was upstairs at home with her feisty American pit bull terrier, Luna, when family guests arrived at her door. Hastening to put her excited dog in a lower-level bedroom, Ruth gathered Luna's leash and began dashing downstairs—but became entangled in the leash.



RICHARD YOON, MD

"I lost my balance and fell the height of four stairs," Ruth says. "I smashed my left hip into the slate floor and broke my femoral neck [a bone in the hip joint]."

Ruth used the banister to stand but couldn't bear any weight, and movement caused more pain. "My husband called an ambulance," she says. "I was in the worst pain of my life."

Scans at a local emergency department confirmed the fracture. Ruth was told she would likely need a hip

KEY FACTS ABOUT BROKEN HIPS

Hip fractures can occur at any age, but nearly 80 percent of people who are hospitalized for them are 65 or older, according to the American Academy of Orthopaedic Surgeons.

"Postmenopausal, Caucasian women are most susceptible to fragility fractures, osteopenia [low bone mass] and osteoporosis [more serious bone loss]," says orthopedic surgeon Richard Yoon, MD, with RWJBarnabas Health Medical Group. "If you fit this profile, see your primary doctor and get a bone density test."

Other factors that increase risks for fractures include smoking, having chronic obstructive pulmonary disease or asthma, and using corticosteroids. Factors that can increase the risks of falling include physical and mental impairments, arthritis, balance issues, poor vision, dementia and use of medications that affect balance or strength, or cause dizziness or drowsiness.

Dr. Yoon recommends that postmenopausal women take vitamin D and calcium supplements. To minimize the risk of falls at home, keep areas well-lit and free of loose cords and rugs.

AVOIDING DOG-WALKING DANGERS

Dog owners applaud the benefits of having canine friends, including getting physical activity when playing and walking. But fun with Fido can pose injury risks.

A 2023 analysis of a national health database found that emergency department visits caused by being tripped or pulled by a dog leash surged by a factor of four between 2001 and 2020. Injuries included broken fingers, shoulder sprains and traumatic brain injuries.

To minimize dog-walking mishaps, researchers suggest using short or retractable leashes and paying close attention to both your pet and surroundings. That includes not gazing at your phone and being aware of doggie distractions such as activity (squirrel!) that might cause your bestie to bolt.

THE HOSPITAL WAS RECENTLY RATED 5-STAR FOR HIP FRACTURE TREATMENT BY HEALTHGRADES.

replacement.

Her family encouraged her to see a surgeon in New York City. But Ruth was happy with cortisone injections she had received for hip bursitis at Jersey City Medical Center (JCMC). The hospital was recently rated 5-star for hip fracture treatment by Healthgrades, a leading online resource for finding high-quality doctors and hospitals.

Confident that she would receive top-notch care closer to home, Ruth asked to be transferred to JCMC.

AN IDEAL CANDIDATE

At JCMC, Richard Yoon, MD, an orthopedic surgeon with RWJBarnabas Health Medical Group and Professor, Director of Orthopedic Research and Fellowship Director in the Division of Orthopedic Trauma and Adult Reconstruction, was on call when Ruth arrived.

"The type of accident Ruth had is, unfortunately, very common," says Dr. Yoon. "Fortunately, she was relatively young, active, healthy, slim and a non-smoker, and she didn't use any assistive devices. These factors, as well as the location of her fracture—just below the ball of the ball-and-socket hip joint—made her an ideal candidate for a total hip arthroplasty [replacement]."

On July 12, 2024, Dr. Yoon performed Ruth's total hip replacement using a direct anterior approach. This type of surgery entailed accessing Ruth's hip from an incision at the front of her body instead of from the side, as is done in a more traditional posterior approach.

"The anterior approach is muscle-sparing and allows for a faster recovery," Dr. Yoon says. "Patients leave the hospital sooner, tend to go home rather than to a rehabilitation center and are usually walking without a cane by two weeks."

The replacement prosthetic uses materials such as high-grade titanium that the bone grows into. The hip joint is made of high-grade plastic with a ceramic head, materials that together give the hardware long-lasting, low-wear properties.

During his hour-long anterior hip replacement procedures, Dr. Yoon uses an X-ray technology called intraoperative fluoroscopy and a specialized operating table. Techniques such as using intrawound antibiotics, a special wash before closing and a dressing with an airtight closure help minimize the risk of infection.

MAKING A QUICK RECOVERY

Ruth was walking the day after her surgery and was discharged the following day.

"At the hospital, the entire staff was wonderful," she says. She underwent physical therapy at home for two weeks. Aside from avoiding specific movements that would stress the joint as it healed during the first six weeks, she had no restrictions on her activity.

Ruth is now back to work, walks daily and exercises regularly. She sees Dr. Yoon for periodic follow-ups and will see him annually after one year. Dr. Yoon expects the new hip joint to last 20 to 25 years.

"Dr. Yoon is a great surgeon," says Ruth. "Getting a new hip was an amazing change in my life. I'm going to be better than I was before."

To learn more about joint replacement surgery at RWJBarnabas Health, visit **rwjbh.org/ortho**.

MANAGING AN EATING DISORDER

A WOMAN LEARNS BEHAVIORAL SKILLS TO IMPROVE HER HEALTH AT A SPECIALIZED INPATIENT PROGRAM.

Care that Kristen Vogt received at the Eating Disorders Program at Robert Wood Johnson University Hospital Somerset addressed past trauma and taught her skills that have helped her live a healthier life.

From the time she was 11, Kristen Vogt struggled with different eating disorders brought on by a history of childhood trauma—behavioral health difficulties that led to frequent swings in her weight. "I spent most of my life going from tiny to not-so-tiny," says Kristen, a therapist at a rehabilitation facility for people with mental illness in Allentown, Pennsylvania. "It was a constant up and down."

When her weight rose sharply three years ago, Kristen was referred for gastric bypass surgery, concerned but not fully realizing how her history of eating disorders could complicate her outcome. The procedure shrinks the size of the stomach, requiring people to eat very small quantities after surgery.

"It was very triggering," Kristen says. "Anorexia—which I struggled with early in my life—came roaring back. I got so unhealthy."

For the first time, Kristen needed to be hospitalized for disordered eating. Other hospitalizations followed in what became a pattern. She would get stabilized and be discharged, and then return to unhealthy eating behaviors.

MATTHEW JOHNSON, DO

But then Kristen learned about the Eating Disorders Program at Robert Wood Johnson University Hospital Somerset, a nationally recognized inpatient unit and one of only two such programs in New Jersey. The program also offers partial hospitalization and outpatient programs for eating disorders as well as support groups to help patients throughout every stage of their recovery. The program is part of RWJBarnabas Health's Behavioral Health Services together with Rutgers Health University Behavioral Health Care.

The Somerset unit sounded promising, despite being more than an hour's drive away. Kristen reached out to learn more and eventually sought treatment.

Medical and behavioral health care she received during winter 2024 finally put her on a path to healing. "I've been out of hospitals ever since," Kristen says. "That really says something."

A DIFFICULT CHALLENGE

Eating disorders can be difficult to treat for numerous reasons, according to Matthew Johnson, DO, the program's medical director and attending psychiatrist. "Eating disorder behaviors are often intertwined with trauma experiences, which, among other reasons, make it difficult to stop those behaviors," he says.

Bombardment by messages about appearance can make difficulties worse. "Pop culture images that saturate social media, films and advertisements—which reinforce the idea that you have to look a certain way—are inescapable," Dr. Johnson says.

Striving to meet unrealistic or distorted standards can drive some people toward behaviors such as unhealthy eating patterns, excessive exercise or the use of laxatives or stimulants in hopes of changing appearance. Such disordered behaviors can jeopardize health, sometimes to a life-threatening extent.

Kristen has struggled at various times with anorexia, which is associated with dangerous weight loss; binge eating disorder; and atypical anorexia, or extreme food restriction in people who are above their ideal weight. "You can starve at any weight," Dr. Johnson says. "It's a matter of not having the food or nutrients you need to sustain life."

Patients' complex needs require a multidisciplinary approach. "As a team, the program's doctors, nurses, therapists and dietitians work to address the barriers to improving patients' health through medical management, dietary support and both individual and group therapy—including music therapy," Dr. Johnson says.

"The therapy I got from my individual therapist was absolutely amazing," says Kristen. "I was able to work through traumas I had not touched to that extent. I did a lot of work in a small amount of time."

SKILLS THAT STICK

A key aspect of the program is teaching patients to manage behaviors by developing inner resources they can use on an ongoing basis.

The Eating Disorders Program—one of only two inpatient eating disorder units in the state—was recently renovated to incorporate design elements that better complement the program's treatments.

"We learned skills," Kristen says. "They taught us how to cope." Depending on their needs, patients at the Eating Disorders Program may also receive occupational and physical therapy.

All patients meet with dietitians to address nutritional needs and develop meal plans. "We were able to come up with a couple of weeks' worth of meal plans with foods that I like and am willing to eat," says Kristen. "That was very helpful. Now I meal-prep every Sunday, and I make enough for both lunches and dinners."

Patients also benefit from various healing techniques in addition to music therapy, including art therapy and creative activities.

"The program treats patients ages 14 and older, with adults and adolescents in separate areas, as the experiences and needs of a teenager are typically different than those of adult patients," says Dr. Johnson. The program and staff have recently treated some senior patients in their 60s and 70s as well.

The 20-bed unit was recently renovated to better complement treatment provided by the program. Features include lighting that shifts to mimic natural daylight changes, acoustic buffering to reduce noise, soft pastel colors to lend a relaxing atmosphere and nature-based artwork to help induce calm.

"I've worked in a number of inpatient settings, and this is by far the nicest environment that I've experienced," says Dr. Johnson.

More important are outcomes he's observed. "It's hard to explain the feeling you get when you see someone significantly improve, knowing that you and other members of the team had something to do with it," Dr. Johnson says. "When things start to click and patients get their lives back, it's exciting and rewarding."

"I still have to remind myself every day that I'm going to be OK," Kristen says. "That's going to be an ongoing process. But the Eating Disorders Program gave me tools that I didn't have before to be able to live my life and trust that I'll continue to be healthy."

For more information about the Eating Disorders Program at Robert Wood Johnson University Hospital Somerset, visit **www.rwjbh.org/eatingdisorders**.

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KEY SCREENINGS

HOW TO CATCH MAJOR HEALTH PROBLEMS WHEN THEY'RE MOST TREATABLE—OR EVEN PREVENTABLE

When patients visit his office for the first time, Angel Lazo Jr., MD, FACP, asks them this question: Do you know the most common health risk in your age group?

"Most of the time, they don't know the answer," says Dr. Lazo, an internal medicine specialist at Jersey City Medical Center and a member of RWJBarnabas Health Medical Group. "My role as a primary care physician [PCP] is to educate patients on their biggest health risks, then help them

ANGEL LAZO JR., MD, FACP

take steps to prevent such problems from happening."

For most adults, heart disease and cancer are the most common risks, with diabetes and stroke close behind. Key measures to prevent these and other conditions include not only seeing your PCP for annual wellness checks but also keeping up with important recommended screenings like these.

HEART DISEASE SCREENINGS

1 Lipid Profile

This blood test checks your cholesterol (total, LDL and HDL) and triglyceride levels, which are key risk indicators for heart attack or stroke. While diet plays an important role in lipid levels, "patients often don't realize that many lipid disorders are genetic," Dr. Lazo says.

When to get it: At least every five years for men age 35-plus and women age 45-plus at normal heart disease risk; earlier if you're at increased risk.

2 Blood Pressure

Measuring the pressure in your arteries as your heart pumps by using an inflatable cuff helps detect hypertension, a major risk factor for stroke and heart and kidney disease.

When to get it: At least annually after age 40; more often if your reading is above 120/80 or if you're at increased risk.

3 Blood Glucose

People with diabetes have high levels of glucose (sugar) in their blood and are at high risk for atherosclerosis, a buildup of plaque in the arteries that can cause heart attacks. "On average, a 50-year-old with diabetes will have the arteries of a 65-year-old," Dr. Lazo says. A blood glucose screening known as a hemoglobin A1c test gives you a three-month average of blood sugar that can identify early signs of diabetes. You can reverse the developing condition if you catch it soon enough.

When to get it: Every three years from ages 35 to 70; more often if you're overweight or obese or have other risk factors.

Other Considerations

Dr. Lazo recommends that people with symptoms of heart disease—or those at high risk of it—ask their PCP for an EKG (electrocardiogram) and/or a cardiac stress test. "Those tests are good ways to detect signs of significant coronary artery disease," Dr. Lazo says.

CANCER SCREENINGS

4 Mammogram

Mammograms can find breast cancer in its earliest and most readily treatable stages.

When to get it: Women should begin getting mammograms at age 40 and continue annually. Women at high risk should speak to their physician about increased frequency.

5 Colorectal Cancer Test

A colonoscopy or a stool-based test can help find early signs of colorectal cancer. An increase in younger people getting colorectal cancer has led to changes in screening guidelines.

When to get it: Individuals at average risk of colorectal cancer should begin regular screening at age 45. Those at higher risk should speak to their doctor about getting screened sooner. Ask your PCP which type of screening test will benefit you most.

6 Cervical Screenings

Pap tests and human papillomavirus (HPV) screenings (often done together) collect cells from the cervix to find abnormalities that may indicate the presence of cervical cancer.

When to get them: Women should receive regular screenings between ages 25 and 65; consult your PCP or OB-GYN at your annual physical.

7 PSA Test

A prostate-specific antigen blood test detects a protein in the blood that, at elevated levels, may be evidence of prostate cancer.

When to get it: Men at average risk should speak to their health care provider to discuss the pros and cons of prostate cancer screening starting at age 45. If you are African American or have a father or brother who had prostate cancer before age 65, you should talk to your health care provider about screening beginning at age 40.

8 Low-Dose CT Scan

This computed tomography test checks for lung nodules—signs of lung cancer that X-rays can't see as well.

When to get it: Annually for people ages 50 to 80 with a 20-pack-year smoking history. A pack year is the packs of cigarettes smoked per day multiplied by the number of years smoked.

Other Considerations

While no screening test exists for ovarian cancer, Dr. Lazo recommends that women let their PCP or OB-GYN know if they have symptoms such as indigestion, constipation, diarrhea or heartburn. "Those are potential early warning signs of ovarian cancer," he says.

ADDITIONAL SCREENINGS

9 Sexually Transmitted Disease Tests

Blood tests can target HIV/AIDS, gonorrhea, chlamydia and syphilis. "Syphilis in particular has been linked to increased risk of dementia as you age," Dr. Lazo says. In addition, a vaccine against HPV is recommended as early as age 9; consult a doctor if over age 26.

When to get them: Annually if you're sexually active.

10 DEXA Scan

Dual X-ray absorptiometry (DEXA) is a low-dose X-ray that measures bone mineral density. Knowing how dense bones are can lead to steps that help reduce the risk of osteoporosis and prevent fractures.

When to get it: At least every two years for women age 65 and older, as well as for women younger than 65 who have undergone menopause.

Other Considerations

Be sure to share STD test results with partners to help prevent the spread of any diseases that come up positive.

To learn more about primary care or to make an appointment, visit **www.rwjbh.org/medgroupprimarycare.**

Groundbreaking Alzheimer's disease care and research led by William Hu, MD, PhD, FAAN, is helping patients throughout the region diagnose and manage early-stage forms of dementia.

A FIRST: SLOWING ALZHEIMER'S DISEASE

HOW A NEW MEDICATION IS CHANGING TREATMENT AND HIGHLIGHTING EXPERT REGIONAL CARE

Alzheimer's disease continues to affect millions of lives, but recent advances in research and treatment are offering new hope for patients and their families.

A promising new drug approved by the U.S. Food and Drug Administration in 2023 is now available at Robert Wood Johnson University Hospital (RWJUH) in New Brunswick. Called Leqembi (lecanemab), it offers significant potential to slow progression of the disease. RWJUH is among the first in the region to offer Leqembi, which is available to patients diagnosed with mild cognitive impairment or mild dementia confirmed to be caused by Alzheimer's disease, throughout the RWJBarnabas Health (RWJBH) system and beyond.

The new drug represents a crucial step forward in understanding and managing Alzheimer's disease. It also highlights the importance of ongoing research and innovation in neurology, including at RWJUH, a neuroscience Center of Excellence.

EASING PROGRESSION

Leqembi is a monoclonal antibody that removes plaques from the brain that are thought to be a major contributor to Alzheimer's. The drug is given twice monthly by intravenous infusion at the outpatient clinic in New Brunswick. It doesn't cure Alzheimer's (no cure is known), but slowing the disease can improve quality of life for patients and their loved ones.

"There have been many generations of drugs that could remove plaque but didn't result in improvement in symptoms over time," says William Hu, MD, PhD, FAAN, Associate Professor, Chief of Cognitive Neurology and Medical Director, Alzheimer's Disease Clinic, Rutgers Robert Wood Johnson Medical School (RWJMS) and RWJUH; Director of the Center for Healthy Aging Research at the Rutgers Institute for Health, Health Care Policy and

LEADERS IN ALZHEIMER'S RESEARCH AND CARE

Neurologists throughout RWJBarnabas Health (RWJBH) and outside providers statewide are referring patients to Robert Wood Johnson University Hospital (RWJUH) for groundbreaking treatment such as the medication Leqembi. Such referrals reflect how the Cognitive Neurology and Alzheimer's Disease Clinic led by William Hu, MD, PhD, FAAN, is recognized for both Alzheimer's treatment and research. The program's accomplishments include:

- Collaboration among providers such as cognitive neurologists, neuropsychologists, geriatricians, nurse practitioners and genetic counselors to combine deep understanding of brain diseases, diverse assessments of brain function and broad expertise in overall health and care of older adults
- Leadership in using minimally invasive spinal fluid tests to provide early, accurate confirmation of changes related to Alzheimer's disease and other forms of dementia
- Significant research, including studies funded by the National Institutes of Health (NIH) exploring mechanisms of Alzheimer's disease such as inflammation and social determinants of health
- Investment in multicultural brain health, including clinical and research programs for Chinese and South Asian older adults—recognized by an NIH designation of RWJUH as the nation's only Resource Center for Alzheimer's and Dementia Research in Asian and Pacific Americans
- Pioneering research leading to the identification of:
  - A protective profile of inflammatory proteins in very mild Alzheimer's disease that can be used in future prognostic tests
  - Molecular profiles distinguishing between Alzheimer's and long COVID-19
  - Novel tests in Chinese people to detect early cognitive decline
  - A new way to identify dementia in older South Asians
  - Other tools used to personalize evaluation and treatment of memory disorders

WHAT IS ALZHEIMER'S DISEASE?

Alzheimer's disease is the most common cause of dementia—marked by a specific, combined set of brain changes and cognitive decline—and affects an estimated 7 million Americans.

Dementia is generally considered to occur when a person experiences enough cognitive decline that it affects daily functioning, according to William Hu, MD, PhD, FAAN, Associate Professor, Chief of Cognitive Neurology and Medical Director, Alzheimer's Disease Clinic, at Rutgers Robert Wood Johnson Medical School and Robert Wood Johnson University Hospital (RWJUH).

A variety of tests, including written ones, help determine if someone has dementia or a milder form of cognitive impairment. Specialized spinal fluid tests or PET (positron emission tomography) scans can confirm that cognitive impairment is caused by Alzheimer's.

Spinal fluid tests evaluate factors associated with Alzheimer's such as the presence of amyloid plaque and tau tangles (abnormal protein structures in the brain that interfere with nerve function), along with brain cell loss/shrinkage and inflammatory responses to these changes. With the advent of effective medications such as Leqembi, spinal fluid tests and PET scans are now covered by a variety of insurance plans, including those from Medicare, Medicaid and Veterans Affairs.

While Alzheimer's has no cure, multiple approaches can help manage its effects. These include lifestyle measures such as exercising, getting daytime light exposure to help keep the brain in a day/night pattern, managing stress and engaging in social/cognitive activities. Symptomatic medications can help improve day-to-day sharpness and memory but don't slow cognitive decline—as new drugs such as Leqembi can.

Aging Research; and a member of RWJBarnabas Health Medical Group.

The latest generation of drugs, which includes Leqembi, can not only remove plaque but also slow declines in memory or thinking by about 25 percent, says Dr. Hu, who oversees administration of Leqembi throughout the RWJBH system. "That's a fairly dramatic change," he notes, "especially if you start early."

The drug's impact is seen in patients about one to two years after treatment is started.

EFFECTS ON LIFE

Many of Dr. Hu's Alzheimer's patients want to know how they can maintain their quality of life after diagnosis—especially how they can remain in their homes as long as possible. Drugs like Leqembi, Dr. Hu says, "can really flatten the change over time. Instead of having five or six points of change over two years, you may only have three or four points of change."

That can make a meaningful difference in people's lives. "If you can delay the conversion from the very earliest stages to the next stages by five years, you essentially reduce the number of people with dementia [at a given time] by half," Dr. Hu says. "It's truly extending the quality of life for a longer period of time."

Leqembi's most common side effects include headache, infusion-related reactions and imaging abnormalities known to occur with antibodies that target the Alzheimer's-related protein amyloid. These side effects can be managed by the expert team at the clinic.

To learn more, call the Alzheimer's Disease Clinic at Rutgers RWJMS and RWJUH at 732.235.7733. Patients and caregivers can also schedule an appointment and begin the process of determining whether a patient qualifies to receive the therapy.

To learn more about Alzheimer's disease care at RWJBarnabas Health, visit **www.rwjbh.org/alz**.

▲ **Rocco Gallagher** (in chair) is honored as an RWJBH Amazing Save by the Jersey Shore Blue Claws in a VIP experience with family and friends. Rocco receives full-time care at Children's Specialized Hospital Long-Term Care in Toms River.

▼ **Trinity Davis** donated 10 copies of her book "Trinity and Sockland" for other patients at the Children's Heart Center at Children's Hospital of New Jersey (CHoNJ) at Newark Beth Israel Medical Center (NBI), where she has undergone two open heart surgeries. In 2024, she was part of NBI's Black Owned Business Fair.

CREATING GREAT EXPERIENCES

COMMUNITY PARTNERS TEAM UP TO CONNECT WITH RWJBARNABAS HEALTH PATIENTS AND FAMILIES.

At RWJBarnabas Health (RWJBH), caring for patients doesn't begin and end with a visit to a doctor or hospital. A systemwide commitment to building and sustaining a healthier New Jersey also means working alongside community partners to connect with patients and uplift spirits—often in fun ways.

For example, RWJBH collaborates on a variety of programs that work with local professional- and college-level sports teams to offer patients and system colleagues great experiences participating in events, being publicly recognized or meeting star athletes in special moments like these.

◀ **Jason Admettre** enjoys an encounter with the mascot of the New Jersey Devils through the Rock Star community outreach program, a collaboration of the Devils and RWJBH. Jason has had two heart surgeries at the Children's Heart Center at CHoNJ to repair a heart condition he's had since birth.

▶ **Dmitri Ferrolho** (right) enjoys a meet-and-greet through the Rock Star program. Dmitri has defied odds through treatments for conditions including spina bifida at The Bristol-Myers Squibb Children's Hospital at Robert Wood Johnson University Hospital in New Brunswick and at PSE&G Children's Specialized Hospital.

◀ **Piettro Gomes** meets the mascot of the Seton Hall Pirates at one of the university's games. Piettro loves sports and is being treated for a rare blood disorder at the Valerie Fund Children's Center for Cancer and Blood Disorders at CHoNJ.

▲ **Justin Corino** (second from right) and his family join a New Jersey Devils player (right) as part of the Rock Star program. Justin has been a champion throughout his treatment for leukemia at the Valerie Fund Children's Center for Cancer and Blood Disorders at CHoNJ.

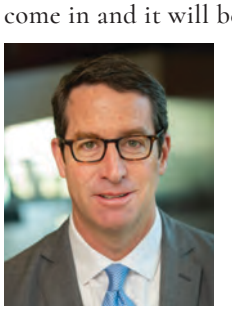
▼ **Timothy Phillips** (third from left) is knighted as the RWJBarnabas Health Shining Knight of the Game. He underwent chemotherapy for leukemia at Rutgers Cancer Institute—the state's only NCI-designated Comprehensive Cancer Center—together with RWJBH, and is now back in school.

To learn more about RWJBarnabas Health programs and services, visit **www.rwjbh.org**.

EMERGENCY MEASURES

HOSPITALS HAVE TAKEN METRIC-DRIVEN STEPS TO MAKE ED CARE FASTER, SAFER AND BETTER.

Christopher Freer, DO, knows the impression that many people have of hospital emergency departments (EDs). "They're notoriously overcrowded with long waits, and the expectation is that you'll come in and it will be a mess," he says.



CHRISTOPHER FREER, DO

As Senior Vice President, Emergency and Hospitalist Medicine at RWJBarnabas Health (RWJBH), Dr. Freer also understands that this expectation can sometimes come uncomfortably close to reality. That's why RWJBH has rethought, reorganized and reinvigorated ED care systemwide.

The initiative has resulted in dramatic improvements. Now some patients are commenting on how efficient and effective emergency care has become. "When that happens, you know you're doing something right," Dr. Freer says. "What we've done is take concepts that should be simple and kept them simple."

Yet making a complex process simple takes thought, planning, teamwork, coordination and communication. That's evident at an ED such as the one at Cooperman Barnabas Medical Center (CBMC), one of the health system's largest. "There might be 70 people coordinating care with patients, with each patient having a different complaint," Dr. Freer says.

"It requires an interdisciplinary process that involves many colleagues, all of whom need to buy in," says Jennifer O'Neill, DNP, APN, NEA-BC, Chief Operating Officer at CBMC.

Strategies to raise the standard of ED care that began being implemented at CBMC in 2022 have since spread to all 12 hospitals in the RWJBH system. "We're not done," Dr. Freer says, "but it's working."

PATIENT-FIRST PRIORITIES

At the core of the initiative is the concept of putting patients first. In a busy setting with a lot of steps happening all at once (including arrival, intake, triage, exam, testing, diagnosis, admission and transport), it's tempting to organize processes in ways that prioritize staff needs. For example, patients might start by providing detailed registration information.

Dr. Freer knows what that can look like. "A line forms for registration," he says. "Then there's a line for the triage nurse. Everything flows into the waiting room. You can see the bottlenecks."

Chokepoints factor into a key metric that's used as a national benchmark of ED performance. It's called LWOBS—left without being seen. "That means you walk in, go through lines, there's no bed available, so you sit, time goes by—and you decide you don't want to wait, so you leave," Dr. Freer says.

To members of RWJBH emergency teams, that's unacceptable. "If a patient leaves without being seen, we've failed the communities we serve," Dr. Freer says. "Our updated process changes the order of things."

The transformation begins the moment a patient walks through ED doors. "We have an experienced nurse stationed near the front door who says, 'Good evening, what brings you here today?'" Dr. Freer says. "Minimal information is taken at that moment—for example, your name—but you're in the system, you're given a wristband and care can begin immediately. We get patients to a room where they see a doctor, nurse, physician assistant or nurse practitioner."

Triage to determine care priorities and any necessary testing comes next. "While you're waiting for lab or scan results, that's when registration team members come back around to complete your information," Dr. Freer says.

Another key concept is what's known as pull to full, meaning patients are pulled into rooms as quickly as possible until beds are full. If beds aren't available, patients can go to a telehealth portal where a provider sees them remotely and starts care by, for example, ordering tests.

Overall, emergency care accelerates. Patients are discharged or admitted to the hospital, and ED beds open again so more patients can receive services.

MARKS OF IMPROVEMENT

The new process leverages information in the Epic electronic medical records system—now implemented throughout RWJBH—to optimize patient flow. That's especially important for the 15 to 20 percent of ED patients who are admitted to the hospital and sent to inpatient beds.

In a process called e-handoff that's coordinated by a crucial hospital logistics team, the system automatically generates electronic notifications when ED providers request an inpatient admission. Notifications tell inpatient providers that a patient is coming, alert ED providers when a bed is available and guide patient transport from emergency to inpatient care. "This all needs to happen expeditiously and safely," Dr. Freer says. "It's a critical piece of the patient journey through the hospital."

Metrics such as LWOBS and the time it takes to move patients to inpatient beds are carefully tracked and communicated to providers across all disciplines and departments. "An email goes out every day," Dr. Freer says. "Every hospital knows whether or not goals or targets are met."

Results have been impressive. "Our LWOBS percentages are significantly below national averages, and some of our hospitals are close to zero," Dr. Freer says. "ED patients move to inpatient beds in 30 to 40 minutes, which is much faster than in the past."

A more efficient ED reflects a more efficient hospital overall, says Dr. Freer, who credits O'Neill with supporting improvements through her teams. "We couldn't do this without all the inpatient pieces working for our patients," he says. "It's a true team effort."

The improvements have changed attitudes toward EDs. "Our patient experience scores are as high as they've ever been pretty uniformly across all our sites," Dr. Freer says. This triggers an additional, significant benefit. "When all this works and patients are happier, staff morale goes way up," he says. "Our staff retention rates are higher than they've been in years."

The combination of efficient care, better quality and the best patient experience is readily summed up, Dr. Freer says: "It's a triple win."

To learn more about emergency medicine at RWJBarnabas Health, visit **www.rwjbh.org**. If you are having an emergency, immediately call **911**.

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From primary care to specialized treatments and therapies and in partnership with Rutgers Health, our Children's Health network provides outstanding care, advanced research and teaching from renowned physicians and clinicians, with an emphasis on the social determinants of health that help to improve the health and well-being of every child in every community. Learn more at **rwjbh.org/ChildrensHealth**

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