The Way to a stronger and healthier community begins on day one.

On Jan. 1, 2014 at 4:02 a.m., Madelyn Jaime-Campuzano was the first baby born in the new year at Christiana Hospital, where 6,427 babies were delivered in fiscal year 2014. We rank 29th in volume for the number of babies delivered in hospitals in the United States.

To learn more about Christiana Care visit:
christianacarenews.org
facebook.com/christianacare
twitter.com/christianacare
www.flickr.com/photos/christianacare

Christiana Care, a leader in innovative and compassionate quality care.
Christian Care is one of the largest health systems in the nation, attracting patients from Delaware, Maryland, New Jersey and Pennsylvania. As a not-for-profit non sectarian health system, our network of facilities makes it easy for neighbors to receive expert care. Christiana Care ranks among leaders by volume in major catagories, with only 20 hospitals in the U.S. having more admissions. We operate the only Level I trauma center between Philadelphia and Baltimore, and Level III neonatal intensive care unit, the only delivering hospital in Delaware to offer this specialized care for newborns. Christiana Care ranks among leaders by volume in major catagories, with only 20 hospitals in the U.S. having more admissions. We operate the only Level I trauma center between Philadelphia and Baltimore, and Level III neonatal intensive care unit, the only delivering hospital in Delaware to offer this specialized care for newborns.
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Janice E. Nevin, M.D., MPH, appointed new president and CEO of Christiana Care

Janice E. Nevin, M.D., MPH, a visionary and collaborative leader in health care, is the new president and chief executive officer for Christiana Care Health System. She succeeds Robert J. Laskowski, M.D., MBA.

Dr. Nevin is nationally recognized for her strong commitment to patient- and family-centered care. Through her leadership, partnering with patients and their families became an integral part of The Christiana Care Way, firmly establishing it as a central tenet of Christiana Care’s culture.

“I am genuinely honored to partner with our physicians, nurses, management and our community to continue to advance The Christiana Care Way,” she said. “Working together we continue to build on a rich tradition of excellence — advancing the transformation of health care for our community and serving as a model for others throughout the country.”

Dr. Nevin helped lead the transformative and strategic shift in care processes at Christiana Care’s Wilmington campus — improving quality, safety and patient experience by directly involving patients and families.

She has served as chief medical officer and chief patient safety officer since 2011. In that role, she advanced Christiana Care’s commitment to patient safety, clinical excellence and patient experience by working closely with system leadership, clinical chairs, physicians, nursing leaders and others to ensure a patient-and family-centered approach to care outcomes, resulting in exceeding the health system goals. She also oversaw Christiana Care’s medical education programs, including the Delaware Branch Campus of Jefferson Medical College and 280 residents and fellows.

She serves on the American Association of Medical Colleges Health Advisory Panel and Leadership Forum and is vice chair, Fellowship Advisory Committee of the Health Management Academy. She is a former president of the Association of Family Practice Residency Directors and was a member of the Project Leadership Committee for the Future of Family Medicine Project.

“With Dr. Nevin’s leadership, Christiana Care will continue its mission of service, strengthen its community ties and broaden its national profile by creating greater value for the patients and families we are privileged to serve,” said Gary M. Pfeiffer, chair of the Christiana Care Board of Directors.
At Christiana Care Health System, we show our exceptional commitment through innovative programs and initiatives to make care more accessible to everyone.

Our education and outreach workers take screenings directly to underserved people, many of whom don’t have insurance. Our Health Insurance Marketplace guides connect uninsured patients with coverage. Our electronic health record system helps health care providers collaborate with one another and with patients while eliminating waste and unnecessary duplication of services. Appointments are more convenient and efficient. We treat patients’ minds as well as their bodies, with a commitment to enhanced access to behavioral health services.
“THE TOP-FLIGHT SKILLS AND CUTTING-EDGE TECHNOLOGY IN OUR NEW FACILITY ARE IMPRESSIVE, BUT THEY ARE NO MORE IMPORTANT THAN THE ROLE OF THE PATIENTS AND FAMILIES WE SERVE.”

— Edmondo Robinson, M.D., MBA, FACP, Senior Vice President & Executive Director, Christiana Care - Wilmington
A hospital transformed in the heart of the city

THE $210-MILLION TRANSFORMATION OF WILMINGTON HOSPITAL BRINGS UNPRECEDENTED ACCESS TO EXPERT CARE, the latest technology and innovative systems of care straight to neighbors in the heart of the city.

Founded 125 years ago as a homeopathic hospital, Wilmington Hospital serves a diverse population, many of whom have not had ready access to high-quality care until now.

At the Rocco A. Abessinio Family Wilmington Health Center, primary-care providers and specialists collaborate and coordinate care in one location, so patients can make more informed decisions to better manage their health.

Patients, their loved ones and care providers benefit from a tranquil AstraZeneca Atrium and Junior Board of Christiana Care Healing Garden that provide open space for respite and meditation. Patients in physical rehabilitation also can navigate a course of steps and various surfaces to prepare for their transition to home.

An upgraded, state-of-the-art Emergency Department is twice the size of the former ED. A new, bright and welcoming main lobby is repositioned on Jefferson Street and provides an enclosed garage walkway named for the Wilmington Campus Executive Campaign Committee co-chairs Gary and Lear Pfeiffer.

Wilmington Hospital also is a shining example of generosity, of caring people devoted to making quality care accessible to their neighbors. Led by the Pfeiffers, the Executive Campaign Committee made an enormous contribution to the success of the project.

In all, benefactors donated $35 million to the initiative, which has grown Wilmington Hospital to a 1 million-square-foot technologically advanced center. They include Carol A. Ammon, a former chair of Christiana Care’s Board of Directors and long-time trustee, whose gift is the largest individual donation in Christiana Care history. The hospital’s gleaming, nine-story tower is named for her. Gifts to the Wilmington Hospital Transformation Project also include 10 donations of $1 million or more and 40 gifts of $100,000 or more.

WILMINGTON HOSPITAL ENHANCEMENTS INCLUDE:

A NEW SURGICAL SUITE, with 13 operating rooms and four procedure rooms.

Capacity for 120 PRIVATE PATIENT ROOMS.

NEW INTENSIVE CARE and INTERMEDIATE CARE units.

AN UPGRADED, 30-BED UNIT for the Center for Advanced Joint Replacement.

A 51,000-square-foot, STATE-OF-THE-ART GATEWAY MEDICAL OFFICE BUILDING, allowing more physicians to practice on-site.
Making healthy connections, one shopper at a time

For the past five years, education and outreach workers from Christiana Care have brought free health screenings and vital information directly to the people at New Castle Farmers Market, offering “Health Info on the Go.” On a typical day, 75-100 shoppers stop by the Christiana Care booth, where there are displays on topics such as colorectal cancer and breast health. Shoppers ask outreach workers questions and can take home educational brochures in English and Spanish.

Shoppers know they can turn to Christiana Care for expert, respectful health education and screenings. “People ask us questions that they don’t have an opportunity to ask somewhere else,” said Nora Katurakes, RN, OCN, manager, Community Outreach and Education at the Helen F. Graham Cancer Center & Research Institute. “That connection breaks down barriers so people can get the care they need.”

In all, more than 1,300 people have received cardiovascular screenings during 41 events at the market. Many come from underserved communities and lack ready access to care. For example, of the more than 260 people screened in 2011 and 2012, 52 percent were minorities, 28 percent had no insurance and 27 percent had not seen a doctor in a year or more.
Marketplace guides connect patients to insurance

At a time of sweeping health care reform, Christiana Care is taking a proactive approach in linking uninsured patients to benefits through the Affordable Care Act and other resources. Christiana Care is the only hospital-based health system in the region to offer the services of health insurance Marketplace guides. The health system employs 12 guides, two of whom speak Spanish.

Since the Marketplace launched in October 2013, Christiana Care guides have reached thousands of people at community-based events, in the Emergency Department and at various health centers, navigating them through the Marketplace and enrolling hundreds of patients, including people with such chronic conditions as type 2 diabetes and HIV who were unable to obtain coverage previously.

New primary care model integrates behavioral health

Patients with behavioral health issues are getting immediate help along with primary care at The Rocco A. Abessinio Family Wilmington Health Center through an innovative model that integrates body and mind. Primary care providers identify patients who would benefit from behavioral health care and then page Alexandra Duncan-Ramos, a psychologist embedded at the center.

The idea is to be immediately accessible and meet with patients in a setting they know and trust instead of referring them for a future appointment. “Behavioral health services add significant value to the system,” said Julie Silverstein, M.D., medical director. “We know there are better outcomes when we treat patients with therapy as well as medications.”

Marketplace guides have enrolled hundreds of patients.

Julie Silverstein, M.D., and Alexandra Duncan-Ramos, MS, Psy.D, led the integration of behavioral health and primary care.
Medical Group of Christiana Care enhances quality, access to care

The Medical Group of Christiana Care is a large, rapidly growing practice designed to serve patients through a variety of specialties and primary care. It’s a shining example of providing value through innovative systems of care. A new call center and a patient portal enhance access. In addition to scheduling appointments through the call center, patients can speak to a registered nurse regarding a clinical concern. The patient portal provides a convenient way for patients to ask questions, request prescription refills and review their medical information.

To increase access to care, the Medical Group has extended office hours, including nights and weekends, and has added new physicians and nurse practitioners. Care also is more efficient. For example, electronic records make it easier for care providers to coordinate care and prevent wasteful spending on unnecessary duplication of tests and procedures. Preventive care helps patients stay well, and patients with chronic illnesses receive the extra help they need.
Delaware’s first patient-centered medical home

Wilmington Health Center is the state’s first certified multi-site patient-centered medical home, where primary care has been transformed into an accessible system of care that can make people’s lives better. Certification by the National Committee for Quality Assurance means that the Adult Medicine Office, Internal Medicine Faculty Practice and Pediatric Practice Program use evidence-based, patient-centered practices that focus on highly coordinated care and long-term relationships with patients who are partners in their care.

Patients receive expert, respectful care from a team that includes a clinical pharmacist, health coach and social worker in addition to doctors and nurses. If patients need extra help, team members partner with patients, their families and resources in the community to make certain they receive it.

Concord Health Center opens

For the large population of patients living near the Delaware-Pennsylvania border, the new Concord Health Center offers accessible, convenient one-stop shopping. Care includes: Christiana Care primary care physicians, board-certified in internal medicine and pediatric care; OB-GYN; specialists in cardiology, radiation oncology, dermatology and endocrinology; outpatient care through Christiana Care’s Helen F. Graham Cancer Center & Research Institute; comprehensive rehabilitation services; advanced cardiovascular testing; diagnostic imaging; and walk-in laboratory testing. The center opened January 2014 in Chadds Ford.

Hearts to Soles: shoes and foot exams for people in need

Christiana Care’s Department of Orthopaedic surgery provided foot examinations to nearly 100 homeless people at the Sunday Breakfast Mission, a homeless shelter in Wilmington, as part of the national Our Hearts to Your Soles initiative. Paul Kupcha, M.D., section chief of Foot and Ankle Surgery, has volunteered with the group for six years. He said the program helps protect homeless people from frostbite and also helps doctors diagnose other problems, such as arthritis, diabetes and hypertension.

“A PATIENT-CENTERED MEDICAL HOME GIVES COORDINATED, MULTIDISCIPLINARY CARE THAT WRAPS ITS ARMS AROUND THE NEEDS OF THE PATIENT.”

— Cheryl A. Jackson, M.D., FACP
Clinical Leader, Internal Medicine Faculty Practice
IN OUR COMMUNITY

Center for Women’s Emotional Wellness

At the Center for Women’s Emotional Wellness, a caring, respectful team partners with women experiencing postpartum depression and other mood disorders that impact a mother’s bond with her baby and her entire family. The center offers outpatient therapy for individuals and couples, as well as evaluation and management of medications and streamlined access to therapy services for women coping with behavioral health challenges before, during and after pregnancy. In addition, the team provides education to medical professionals throughout the primary care community to raise awareness about perinatal mood and anxiety disorders.

“WE WANT WOMEN TO KNOW THAT CHALLENGES ASSOCIATED WITH PERINATAL MOOD AND ANXIETY DISORDERS ARE REAL, AND THEY CAN BE SCARY, BUT THEY ARE NOT A WOMAN’S FAULT AND THEY ARE VERY TREATABLE.”
— Megan O’Hara, LCSW
Center for Women’s Emotional Wellness

Leading the way in transforming health information

The Delaware Health Information Network (DHIN) is the first and most advanced Health Information Exchange (HIE) in the nation, including nearly 100 percent of Delaware-based health care providers. Christiana Care Chief Information Officer and Senior Vice President of Innovation and Strategic Planning Randall Gaboriault leads the DHIN as board chair.

The DHIN is the first statewide exchange to expand across state lines for an HIE-to-HIE transfer of critical patient information. The network connected 10 additional hospitals in Maryland, bringing to 15 the number of hospitals in that state sending admission, discharge or transfer information to the DHIN for Delaware citizens. This allows doctors of Delaware residents to view information in their patients’ records from significant hospital events, such as an emergency room visit, and provide faster follow-up care.

The DHIN also includes an Event Notification System that allows primary care providers to quickly learn when a patient has a hospital-based encounter. This information “push” streamlines care and helps providers qualify for Medicare transitions-in-care reimbursement payments, facilitating faster patient follow-up after a hospital discharge.
Imagine Delaware highlights solutions to heroin crisis

The Imagine Delaware forum, a partnership between Christiana Care and the News Journal, put a spotlight on heroin addiction and the resources that are available to help people who are addicted to the drug. The June forum featured a discussion about the benefits of Project Engage, an innovative program created in 2008 by Terry Horton, M.D., Christiana Care’s chief of addictive medicine.

Project Engage collaborates with Brandywine Counseling and Addiction Services to save lives. Engagement specialists meet with patients and families at a teachable moment, often during a period of withdrawal from drugs. The specialists share their own struggles with addiction and how they were able to overcome it. They also link patients directly to addiction treatment programs in the community.

VNA special fund helps patients with costs insurance doesn’t cover

Since 2004, the Christiana Care Visiting Nurse Association has helped patients pay for essential resources through the VNA’s Special Needs Fund. “Because we see patients in their homes, the VNA staff is uniquely positioned to identify ways to help patients get well and stay safe,” said Lynn C. Jones, president, Christiana Care Home Health and Community Services.

Often, the fund pays for durable medical equipment that isn’t covered by Medicare or wound care supplies for patients recovering from surgery. Patients can get bridge coverage to pay for medications while they are enrolling in a Medicare Part D program. The fund also pays for non-medical items, such as paratransit tickets that enable patients to get to medical appointments.

Encouraging Healthy Families in the Hispanic community

Christiana Care’s Community Health and Education staff is helping to encourage healthy families in the Hispanic community by recruiting and educating promotoras, Latinas who promote wellness and screenings throughout their neighborhoods. Christiana Care partners with the Latin American Community Center in Wilmington in the Healthy Families initiative, a free program that links families with or without insurance to screenings, preventive care and chronic disease care, including care for children with asthma. Healthy Families is funded by the Arsht Cannon Fund.

Christiana Care also reaches out to the Hispanic community at health fairs and other events throughout the year, gaining trust, building relationships and connecting people with care.
$2.5 million gift will transform care, raises awareness of memory disorders

The Swank Foundation, dedicated to transforming care for people with memory issues, has made a generous $2.5 million contribution to Christiana Care to establish the Swank Foundation Endowed Chair in Memory Care and Geriatrics.

This gift will leverage the success of the Swank Memory Care Center as a leading resource in Delaware and the region for patients with Alzheimer’s disease and other memory disorders. Founded in 2011 by a generous $1.25 million grant by the Howard W. Swank, Alma K. Swank and Richard Kemper Swank Foundation, the Swank Memory Care Center in Wilmington is the first and only comprehensive outpatient program of its kind in Delaware.

Further advancing this work, The Swank Foundation Endowed Chair in Memory Care and Geriatrics, to be recruited in a national search, will champion innovative care, prevention efforts, extensive education for health care providers and caregivers, and vital research in memory care.

The Swank Foundation Endowed Chair in Memory Care and Geriatrics will contribute to the State of Delaware’s Alzheimer’s Plan, promoting public awareness of the disease, strengthening the support for caregivers of people with Alzheimer’s and advancing the important and growing infrastructure of related data, quality assurance and research.

This endowment further positions Christiana Care as a leader, innovator and integral component in the care of seniors in our region with the exceptional support of the Swank Foundation. The Foundation was established in 2006 through the generosity of the late Howard and Alma Swank, who were longtime residents of Wilmington.

For more information, call the Office of Development at 302-327-3305 or email developmentoffice@christianacare.org.
The Center for Heart & Vascular Health provides patients in Delaware and the surrounding area with superb access to expert care and leading technology.

Christiana Care is among fewer than 80 institutions nationwide to achieve Comprehensive Stroke Center Certification from the Joint Commission and the American Heart Association/American Stroke Association. We rank in the top 10 in the nation for the number of stroke cases we treat.

It’s the only center in the region to offer cardiac surgery, vascular surgery, vascular interventional radiology, cardiology and stroke specialists under one roof, providing patients unprecedented value and convenience. We are caring, respectful partners with our patients in our passion to achieve optimum heart and vascular health through preventing heart disease and stroke, planned care, emergency care, rehabilitation and ongoing support.
“MY TEAM ANSWERED EVERY QUESTION I HAD AND OFFERED ME ALL THE ENCOURAGEMENT AND SUPPORT ANYONE COULD IMAGINE.”

— Gordon Reid, Rehoboth Beach
Back on his bike, thanks to expert stroke care

GORDON REID WAS ONLY IN HIS 40S WHEN HE SUFFERED A HEART ATTACK. For decades, he took blood thinners prescribed to help prevent a subsequent attack.

Years later, at 83, he was seemingly healthy. The retired safety engineer is an avid bicyclist who repairs bicycles and coordinates volunteers at Cape Henlopen State Park near his home in Rehoboth Beach.

He was spending time at home in April when he suddenly collapsed. “I went out like a light – boom,” he recalled. “My wife thought I was dead.”

Reid had suffered a brain bleed, or hemorrhagic stroke, a potentially lethal condition caused by blood leaking into the brain. Doctors believe the stroke was related to years of taking blood thinners.

Shortly after his arrival at Beebe Medical Center in Lewes, Reid was rushed by helicopter to Christiana Hospital, home of the Center for Heart & Vascular Health, where he would have access to the highly skilled care required for such a serious stroke.

“He was transported to Christiana Hospital due to our additional expertise in treatment of complex strokes like his,” said Jonathan Raser-Schramm, M.D., Ph.D., medical director of the Stroke Program.

Christiana Hospital has earned Comprehensive Stroke Center Certification from the Joint Commission and the American Heart Association/American Stroke Association, giving patients in Delaware and the surrounding areas unprecedented access to high-quality, comprehensive stroke care. Fewer than 80 hospitals nationwide have earned this recognition.

The designation affirms that Christiana Hospital offers the medical expertise and state-of-the-art infrastructure that is necessary to successfully treat the most complex cases. The stroke program also helps patients beyond the walls of the hospital by coordinating follow-up care for patients and supporting community outreach on stroke prevention.

Now, patients with even the most serious strokes can get the care they need close to home.

Reid was admitted to the Lanny Edelsohn, M.D., Neuro Critical Care Unit for monitoring and treatment with medications that reverse blood thinners. Dedicated in October 2013, the state-of-the-art 18-bed NCCU is the only unit of its kind in Delaware and is devoted solely to patients with immediate, life-threatening problems.

In only a few days, Reid was able to return home. After his release, he continued to follow up with Dr. Raser-Schramm at Christiana Care’s stroke clinic, where his physicians and care team closely monitored his condition and medications. He was taken off blood thinners and began an aspirin regimen.

“He was transported to Christiana Hospital due to our additional expertise in treatment of complex strokes like his,” said Jonathan Raser-Schramm, M.D., Ph.D., medical director of the Stroke Program.

“Being certified at this level recognizes not just the medical expertise and technology we offer, but also that we do provide these services using a model that focuses on the patient’s experience,” said Melissa Bollinger, RN, BSN, MBA, administrative director for neurosciences. “Comprehensive programs recognize the importance of providing high-quality care that is individualized to the patients and their families.”

The expert team at the center worked with Reid to help him reclaim his life. Over the next few months he began to resume his normal activities: riding his bike, volunteering at the park and playing golf two or three times a week. They assessed his ability to drive and gave him the green light to get behind the wheel again.

“Now I’m back to normalcy,” he said. “Dr. Raser-Schramm and the team at Christiana Care answered every question I had and offered me all the encouragement and support anyone could imagine.”

Reid was soon back volunteering at the park. He chairs the bike maintenance program, keeping in tiptop running condition 40 bikes that will be ridden by 14,000 riders.

“The other morning I rode my bike for 17 miles and felt great,” he said. “People tell me I look very young for my age.”
Patient navigators help patients stay healthy at home

Christiana Care is one of 13 hospitals nationwide selected by the American College of Cardiology to participate in a new Patient Navigator Program, which is designed to keep patients healthy at home after discharge from the hospital. The program supports patients who are at advanced risk for readmission by helping them to overcome challenges during their hospital stay and in the weeks after they are discharged. A team of caregivers partners with patients to help them understand their medical conditions, care plans and medications and how to access community resources.

“We have the opportunity through this program to provide patients with the support and guidance they need when discharged so they can remain in their homes with their family and can focus on recuperating.”

— Timothy J. Gardner, M.D.
Director, Center for Heart & Vascular Health
Executive Director, Christiana Care Value Institute

Meenakshi A. Bhalla, M.D., and Susan Felicia, MSN, PNP-C, CHFN, examine a patient at the Christiana Care Center for Heart & Vascular Health.
Neuro critical care unit is state of the art

The Lanny Edelsohn, M.D., Neuro Critical Care Unit provides patients who have serious neurovascular illnesses and injuries with expert care and leading-edge technology. Dedicated Oct. 2, 2013, the unit was funded with $1.3 million in contributions, most from Christiana Care trustees. The 18-bed NCCU is home to continuous electroencephalogram (cEEG) technology, considered fundamental in helping to prevent irreversible neurological damage and death. This innovative technology also will improve care for people with seizure disorders.

Psychologist specializes in cardiovascular patients

A cardiovascular psychologist at the Center for Heart & Vascular Health provides patients with ready access to behavioral health services. Vanessa Downing, Ph.D., sees inpatients facing acute and chronic diagnoses, including heart attack, heart failure and amputation as a result of vascular disease. She also helps outpatients optimize their health by exploring their fears and embracing such behaviors as quitting smoking and exercising regularly.

Christiana Care first in state to offer apheresis option

A new program offers expert, convenient care to patients with familial hypercholesterolemia, a rare genetic disorder characterized by high levels of low-density lipoproteins (LDL), often called bad cholesterol. A collaboration between the Center for Heart & Vascular Health and the Ambulatory Infusion Center, the LDL Apheresis Program treats patients who do not respond to traditional treatment with statins. Apheresis is a procedure much like dialysis. The patient’s blood is separated so the bad cholesterol can be removed. Previously, patients had to travel to Philadelphia or Baltimore for treatment.
HEART & VASCULAR HEALTH

Advanced certification in heart failure

The Joint Commission has recognized Christiana Care’s Center for Heart & Vascular Health with Advanced Certification in Heart Failure. Certification signifies the health system’s dedication to providing the highest quality care for patients with heart failure. It demonstrates that Christiana Care’s services have met critical elements to achieve long-term success in improving outcomes for patients with heart failure.

Cardiovascular Critical Care Complex earns AACN gold

Christiana Care’s Cardiovascular Critical Care Complex has won a gold level Beacon Award for Excellence from the American Association of Critical-Care Nurses (AACN), one of only 27 gold-level awards in the U.S. and the only one in Delaware. The award caps a two-year initiative to bring three units — Cardiac Medical Intensive Care, Cardiovascular Surgical Intensive Care and Open Heart Stepdown — together into one cohesive, highly functioning operation.

VNA’s award-winning telehealth program

Christiana Care’s Visiting Nurse Association’s “Control Your Heart for the Future” telehealth program won a national award for innovation at the Medicaid Health Plans of America 2013 Best Practices Awards in Washington, D.C. The program helps Medicaid patients who have congestive heart failure to improve their quality of life by more effectively monitoring their condition. The program incorporates education, self-monitoring and medication management and also addresses patients’ socioeconomic needs.

Hundreds get moving at Dance Your Heart Out

Dance Your Heart Out combines screenings, education and fun to bring home the importance of exercise. More than 500 people, most of them women, attended the annual event on March 20 at the Chase Center on the Riverfront in Wilmington. Participants received free screenings, including blood pressure, bone density and body-fat analysis. They also learned how to measure their waist circumference, an indicator of risk for heart disease and stroke. In all, 213 participants received blood pressure screenings, 147 were screened for bone density and 150 had their body mass indexes (BMI) calculated and measured for percentage of body fat.
THE CENTER FOR HEART & VASCULAR HEALTH HAS BEEN RECOGNIZED BY:

**JOINT COMMISSION:**

- **ADVANCED CERTIFICATION** for treatment of patients with advanced heart failure.
- **PRIMARY STROKE CENTER CERTIFICATION** for the Wilmington Campus.
- **COMPREHENSIVE STROKE CENTER CERTIFICATION** for the Christiana Campus.

**AMERICAN HEART ASSOCIATION:**

- **GET WITH THE GUIDELINES — HEART FAILURE GOLD PLUS AWARD** for exceptional care of patients with heart failure.
- **GET WITH THE GUIDELINES — STROKE GOLD PLUS QUALITY ACHIEVEMENT AWARD** for implementing a higher standard of care for stroke patients.
- **TARGET: STROKE HONOR ROLL,** the only hospital in Delaware and one of only a few in the Philadelphia region.

**AMERICAN COLLEGE OF CARDIOLOGY FOUNDATION:**

- **ACTION REGISTRY· GWTG GOLD PERFORMANCE ACHIEVEMENT AWARD,** earned by only 32 hospitals in the nation, for success in carrying out a higher standard of care for heart attack patients.
Volunteer ambassadors and champions are at the heart of two dynamic initiatives focused on providing greater access to cardiovascular health care.

The Center for Heart & Vascular Health’s Blood Pressure Ambassador Program was developed to increase awareness of hypertension in the African American community. African Americans are twice as likely as Caucasians to develop high blood pressure, to experience hypertension at a younger age and to suffer severe organ damage or die.

Blood pressure ambassadors are Christiana Care employees and community members who volunteer their time to deliver key messages about the consequences of untreated high blood pressure, such as stroke, heart disease and kidney disease.

They also perform blood pressure screenings at various community events. That includes educating our neighbors on the importance of knowing their numbers and being connected to a primary care provider.

The model combines peer education and camaraderie, said Elisabeth Bradley, APN, clinical leader of the Cardiovascular Prevention Program. Bradley and Tamekia Thomas, APN, critical care education coordinator, lead the team and encourage the ambassadors to get the word out at health fairs, church meetings and other events, as well as informal settings, such as family reunions and evenings out with friends.

Former banking executive Michelle Shepherd chairs Champions for the Center for Heart & Vascular Health, a new initiative that harnesses the power of volunteer talent.

“Our mission is to work in cooperation with the expert clinical staff, led by Medical Director Dr. Tim Gardner, to improve awareness and education in our community and enhance the patient experience,” she said. “Specifically, we are working through advocacy and philanthropy to support research into heart disease and stroke, public education efforts on prevention and early detection and the implementation of leading-edge treatments.”

Shepherd is setting up structured committees focused on development, advocacy and special events to maximize the organization’s impact while putting the individual skills of volunteers to best use.

“WE ARE WORKING THROUGH ADVOCACY AND PHILANTHROPY TO SUPPORT RESEARCH INTO HEART DISEASE AND STROKE, PUBLIC EDUCATION EFFORTS ON PREVENTION AND EARLY DETECTION AND THE IMPLEMENTATION OF LEADING-EDGE TREATMENTS.”

— Michelle Shepherd
Chair, Champions for the Center for Heart & Vascular Health

For more information, call the Office of Development at 302-327-3305 or email developmentoffice@christianacare.org.
The Helen F. Graham Cancer Center & Research Institute is leading the way in Delaware’s dramatic decline in both cancer rates and deaths from cancer, benefiting patients through access to evidence-based medicine, research and community outreach.

One of the first designated National Cancer Institute Community Cancer Centers Program sites in the United States, the Graham Cancer Center is a national model for other health care systems and is a leader in enrolling patients in clinical trials. Cancer centers across the nation emulate our patient-navigation system, and our unique model of care gives every patient quick access to a team of world-class cancer specialists.

In 2006-2010, Delaware’s cancer mortality rate declined 17.5 percent, 38 percent more than the national decline of 12.7 percent. The state outpaced the nation in reducing deaths from a number of cancers, including breast, colorectal, lung, prostate and skin (melanoma) cancers.

Medical Oncologist
Stephen S. Grubbs, M.D.,
is the NCI’s Community Oncology Research Program principal investigator at the Helen F. Graham Cancer Center & Research Institute.
“EVERYONE EXPLAINS THINGS TO ME...THAT HELPS A LOT. I AM THANKFUL FOR THE CARING PEOPLE HERE.”

— Sandra Aguilera, Wilmington
GENETIC COUNSELING PROGRAM BRINGS LIFE-SAVING TREATMENT TO OUR NEIGHBORS

SANDRA AGUILERA WAS WORRIED ABOUT HER HEALTH AND DID NOT KNOW HOW TO OVERCOME WHAT SEEMED LIKE INSURMOUNTABLE BARRIERS TO CARE. A native of Mexico, Aguilera is a 36-year-old mother of two who lives in Wilmington. She does not speak English. She has no health insurance.

She also has a family history of colon cancer. Her maternal grandfather, maternal aunt and cousin on her mother’s side of the family died from the disease. Her mother had surgery in 2011 to prevent thousands of polyps in her colon from progressing to cancer.

“I had some bleeding and thought it was hemorrhoids,” she said, speaking through a Christiana Care certified medical interpreter. “But the medications weren’t helping and I needed a colonoscopy.”

At the Helen F. Graham Cancer Center & Research Institute, Aguilera gained access to tests, treatment and genetic counseling, all focused on saving her life and potentially the lives of other family members. Medical interpreters kept the lines of communication open.

She had a colonoscopy, paid for by the Screening for Life program. The test revealed multiple polyposis syndrome, a condition that occurs in as many as one in 7,000 individuals.

“People with this syndrome tend to form hundreds to thousands of polyps in the colon,” said Zohra Ali-Khan Catts, MS, LCGC, director of Cancer Genetic Counseling. “When you have that many polyps it’s extremely difficult for a surgeon to remove them all.”

Ali-Khan Catts leads a team of five genetic counselors at the Graham Cancer Center. The team is extending access to care to underserved neighbors throughout the state, working closely with Christiana Care’s Wilmington Family Medicine practice, the HIV program and the Community Health Access Program, Bebee’s Tunnell Cancer Center in Lewes and Nanticoke Cancer Center in Seaford and federally qualified centers such as Westside Family Healthcare. Since 2002, the team has provided genetic counseling to more than 5,700 patients across Delaware, with more than 3,400 choosing to be tested.

“We are trying to make sure there are no barriers to care,” she said. “Reaching out to Hispanics and other populations is equalizing access, allowing us to identify high-risk patients and take action.”

Based on the results of her tests, Aguilera underwent preventive surgery to remove her colon and rectum before they became cancerous.

“The surgeon said that they needed to be removed as soon as possible,” she said.

She also had an endoscopy, in which a lighted flexible instrument was guided into her stomach. “The stomach had a whole lot of polyps, too,” she said.

Aguilera now gets an endoscopy every six months to monitor the number of polyps in her stomach.

Health coaches at Christiana Care’s Community Health Access Program identified resources to help pay for her care. They also guided her to a low-cost prescription program at Walmart.

“Without Screening for Life and the other programs, she would not have had access to the care she needs,” Ali-Khan Catts said.

The genetic counseling team at the Graham Cancer Center is now working with four other branches of Aguilera’s family to determine who is at risk for multiple polyposis syndrome, as well as hepatoblastoma, a childhood liver cancer. Aguilera has two sons, ages 9 and 14.

It is not yet known what gene is producing the polyps that have devastated the family. So the team recruited a partner to help crack the code.

“We are working with a lab company to see if we can get testing done to identify the mutation,” Ali-Khan Catts said.

Aguilera and her extended family will continue to receive expert, respectful care at the Graham Cancer Center.

“Everyone explains things to me so that I understand and that helps a lot,” she said. “I am thankful for the caring people at Christiana Care.”
Graham Cancer Center celebrates 10 years of saving lives

In only a decade, the Helen F. Graham Cancer Center & Research Institute has become a national leader in comprehensive, multidisciplinary cancer treatment, services and research. Access to expert care has made a dramatic difference in Delaware. Before the Graham Cancer Center opened, Delaware had the second highest cancer mortality rate in the U.S.; today, the state ranks 14th, and deaths from cancer are falling dramatically.

Graham Cancer Center is tops in national cancer care survey

Patients at the Graham Cancer Center gave their experience the highest overall score for quality of cancer care in a survey of six cancer centers by the Mayo Clinic and the American Institutes for Research. In the prototype Consumer Assessment of Healthcare Providers and Systems Survey for Cancer Care, Christiana Care had the highest score for overall care with 88 percent of patients giving their team a 9 or 10 on a scale of 10. The Graham Cancer Center also was tops in four of five composite measures: affective communication; shared decision making; exchanging information and keeping the patient up to date; and access to care.
NCI grant brings cancer care to the community

The Helen F. Graham Cancer Center & Research Institute has earned a five-year, $8.2 million grant from the National Cancer Institute’s Community Oncology Research Program to bring leading-edge cancer screenings, prevention, control, treatment and imaging research trials to more people in places closest to where they live.

The Graham Cancer Center is one of only 34 NCORP Community Sites joined by 12 Minority/Underserved Community Sites that will implement the latest, most scientifically advanced clinical research designed and led by NCORP. These clinical trials will bring added opportunity to test new technologies and strategies to fight cancer. They also will enable research on how cancer care is delivered in today’s changing health care environment, all with an eye toward improving outcomes and reducing disparities of care.

Minimally invasive surgery for esophageal cancer

The Graham Cancer Center is among a select group of centers offering groundbreaking laparoscopic technology to treat most esophageal cancers. Minimally invasive or “keyhole” esophagectomy allows patients to heal faster and with fewer complications than conventional, open surgery.

“IN PARTNERSHIP WITH NCORP, WE CAN CHANGE THE LANDSCAPE OF CANCER CARE DELIVERY IN DELAWARE AND THROUGHOUT THE COUNTRY IN SIMILAR COMMUNITIES, WHERE WE KNOW 80 PERCENT OF PATIENTS RECEIVE THEIR CANCER CARE.”

— Nicholas J. Petrelli, M.D.
Bank of America Endowed Medical Director, Helen F. Graham Cancer Center & Research Institute
Wistar partnership advances cancer treatment

The Helen F. Graham Cancer Center & Research Institute’s historic partnership with The Wistar Institute in Philadelphia is focusing on cracking the code for diagnosing and treating many types of cancer. The partnership nurtures education and collaboration between scientists and clinicians. Current endeavors include work on a simple blood test for lung cancer, and identifying markers for ovarian cancer that would enable doctors to detect the disease earlier. Graham Cancer Center patients also are donating melanoma tumor samples to Wistar where they are studied to identify genetic drivers to learn why some tumors are resistant to treatment.
American Cancer Society honors
Diana Dickson-Witmer, M.D.

Diana Dickson-Witmer, M.D., medical director of the Christiana Care Breast Center, is
the recipient of the American Cancer Society’s 2013 Home Town Heroes award. The
award reflects Dr. Dickson-Witmer’s commitment to educating the community about
the importance of breast cancer screening and a healthy lifestyle.

Dr. Petrelli receives clinical research honors,
governor’s award

Nicholas J. Petrelli, M.D., Bank of America Endowed Medical Director of the Helen
F. Graham Cancer Center & Research Institute, received the 2014 Clinical Research
Award from the Association of Community Cancer Centers in recognition of his
ground-breaking leadership initiatives promoting and advocating for oncology clinical
research. In honor of his leadership role in transforming cancer care in Delaware,
Dr. Petrelli received the Order of the First State from Gov. Jack Markell. The accolade
is the highest honor the governor can grant to a civilian.

Graham Cancer Center hosts Tissue Engineering Summit

The largest group in the nation collaborating to create artificial salivary glands in the
laboratory gathered at the Graham Cancer Center in August 2014 to discuss their
progress. Principal Investigator Robert Witt, M.D., director of the Multidisciplinary
Head and Neck Cancer Center, and Swati Pradhan Bhatt, Ph.D., director of Tissue
Engineering at the Center for Translational Cancer Research, hosted the two-day
summit attended by team members from the University of Delaware’s Materials
Engineering and Biological Sciences Departments, Rice University in Houston and
Allegheny Health System in Pittsburgh. Also attending were scientists from the
National Institutes of Health, which awarded the team $2.5 million to fund the project
over the next four years.

Breast Center designated ACR Center of Excellence

The Christiana Care Breast Center is designated a Breast Imaging Center of
Excellence by the American College of Radiology. Imaging services are fully accredited
in mammography, stereotactic breast biopsy, breast ultrasound and ultrasound-
guided breast biopsy. In addition, Christiana Care has achieved high practice
standards in image quality, personnel qualifications, facility equipment, quality control
procedures and quality assurance programs.
Partnering to bring a better quality of life for Hispanic families is the mission of The Arsht Cannon Fund at the Delaware Community Foundation and Christiana Care.

“One of the key purposes of our fund is to foster collaboration in order to increase access to health care,” said Christine Cannon, executive director.

In choosing a partner to reach out to underserved Hispanic people, Cannon looked to the Community Health Outreach & Education Department at the Helen F. Graham Cancer Center & Research Institute.

A former nurse at Christiana Care, Cannon knows first hand the health system’s commitment to partnerships that reduce disparities to health care.

“I’m impressed that they don’t expect people to come to them,” she said. “They bring screenings, education and resources directly to the people.”

A donation from Arsht Cannon funded the Healthy Latin Families program, a free program administered by Christiana Care and the Latin American Community Center for families in New Castle County who want to lead healthier lives. The program helps families who need screenings and preventive care or who suffer from chronic diseases, including children with asthma.

Healthy Families provides an avenue to care for people without health insurance. The Arsht Cannon grant also pays for a bilingual program coordinator at the Graham Cancer Center, where patients have access to such services as education, assessments and community referrals.

For example, a 50-year-old Hispanic mother received a free mammogram at the Graham Cancer Center. Through the Healthy Families program, her teen-age son was referred for a CT scan after he hurt his head in a car accident. Her 12-year-old daughter was treated for scoliosis or curvature of the spine.

Promotoras for Healthy Families are women trained at the Graham Cancer Center who “promote” health and wellness, taking a message of education, screenings and prevention back to families in the Hispanic community.

Cannon keeps in close contact with Nora Katurakes, RN, MSN, OCN manager, Community Health Outreach & Education.

“The Arsht Cannon Fund and Christiana Care are true partners in improving access to care,” she said.

For more information, call the Office of Development at 302-327-3305 or email developmentoffice@christianacare.org.
Robotic mannequins are capable of simulating a wide range of medical conditions at Christiana Care’s Virtual Education and Simulation Training Center.

Christiana Care’s robust and innovative partnerships in clinical, translational and outcomes research focus on speeding new ideas, technologies and treatments to improve our neighbors’ health.

That dynamic fusion of science and humanity keeps clinicians at the top of their specialties and attracts the brightest and the best to serve as faculty and mentors in our acclaimed and fully accredited graduate medical education programs and undergraduate student rotations. Finding innovative ways to enhance education and propel research is an important part of the way we enhance access to care.
“EVERYONE IS VERY KNOWLEDGEABLE AND FRIENDLY. IT IS GOOD TO KNOW THEY ARE THERE WHENEVER I NEED THEM.”

— Suresh Somepally, Newark
SURESH SOMEPALLY WAS ONLY 35 YEARS OLD WHEN HE HAD HIS FIRST HEART ATTACK. “The only thing that scared me more than the attack was the thought that I might have another one someday,” he recalled.

Through an innovative program at Christiana Care, Somepally gained access to expert support beyond the walls of the hospital, getting extra help in leading a heart-healthy life and avoiding a subsequent attack.

Bridging the Divides, or Bridges, is part of a three-year, $10 million grant from the Center for Medicare and Medicaid Innovation. Christiana Care’s proposal was one of only 107 projects chosen by CMMI from a nationwide pool of 4,000 applications.

Launched in July 2012, the program includes more than 2,900 patients with coronary artery disease and harnesses new information technology to offer more coordinated case management than has been possible in the past.

The care management team, which forms part of Care Link Services, includes social workers, nurses, a pharmacist, a health ambassador, a care management supervisor and a physician advisor.

Eileen Kogut, the senior social worker who manages Somepally’s case, said patients are true partners in their care. “The team and the patient all work together on the patient’s behalf,” she said. “We talk about their medications and their next appointment. We encourage cardiac rehabilitation.”

Somepally, a software engineer, has multiple risk factors for cardiovascular disease. He has high blood pressure, diabetes and a family history of heart problems. His father died of a heart attack at 37.

After his attack, surgeons implanted a stent in an artery to improve blood flow to his heart. When he was recovering at Christiana Hospital, an inpatient nurse manager met with Somepally and his wife Hyndavi at his bedside to discuss his medications and suggest lifestyle changes.

Somepally was concerned about the cost of his medications. So the pharmacist on his team researched prices at various drugstores and identified a pharmacy that would fill his prescriptions at a significant discount.

“We know that when patients think their medications are too expensive they are less likely to take them,” Kogut said. “We want to make things as easy as possible for them to stay healthy.”

In addition to office visits, the team keeps in touch by phone, calling Somepally within 24 hours of discharge. Patients are screened for signs of heart disease, as well as depression. He will continue to receive calls at regular intervals for an entire year.

Kogut also mailed educational materials and recipes for a heart-healthy diet to his home in Newark.

The system’s advanced technology can identify data points that are common for patients when they are readmitted, enabling the team to identify potential problems sooner. Bridges also is designed to tap into several databases, including the Delaware Health Information Network, which offers more than 90 percent of lab results statewide, and best practices data collected in registries of the American College of Cardiology and the Society of Thoracic Surgery.

Bridges will offer an electronic portal that patients and families can use for direct email communication with Care Link Services. This secure computer connection will provide access to a patient’s medical record and help patients become greater partners in care.

As for Somepally, he is keeping up the good work after his cardiac rehabilitation, walking on a treadmill for 30 minutes to an hour each day. He has embraced a low-fat diet and has lost 10 pounds.

“I am very cautious about my diet,” he said. “I eat mostly vegetables and very little meat, maybe a little fish.”

He knows he can always turn to his team at Christiana Care for expert advice and compassionate encouragement.

“Everyone is very knowledgeable and friendly,” he said. “It is good to know they are there whenever I need them.”
Partners in $28 million translational research grant

Christiana Care is leading a new kind of research endeavor developing projects in partnership with members of underserved communities to improve health. “ACCEL” — Accelerating Clinical and Translational Research — is a $28 million multisite grant from the National Institutes of Health. In a key component of the ACCEL grant, Christiana Care is working to conduct research that is meaningful to Delawareans, and ultimately will improve health in the First State.

Delaware CTR-ACCEL has awarded pilot grants to Christiana Care researchers to further their studies on breast cancer treatment options, on decision-making in extremely pre-term birth and on community-based participatory research in Wilmington.

More than 200 researchers, health care professionals and community leaders attended the Delaware CTR-ACCEL conference on community engagement in May 2014 in Wilmington. The conference focused on how to develop research initiatives that translate from hypothesis to effective treatment and better health care.

Diabetes nurses help patients take control

One of every five patients admitted at Christiana Care has diabetes and many receive their diagnoses in the hospital. Diabetes resource nurses are specially trained to work with patients one-on-one, educating them on medications, diet, exercise and community resources that will help them to manage their diabetes after they are discharged. Diabetes typically adds one day to the patient’s length-of-stay. Since the program began in 2010, readmission rates for patients who work with the nurses have decreased 19 percent.

“THIS IS THE BEST COLLABORATION I CAN THINK OF FOR A GRANT AIMED AT BUILDING THE INFRASTRUCTURE FOR POPULATION HEALTH.”

— William S. Weintraub, M.D.
The John H. Ammon Chair of Cardiology, Center for Heart & Vascular Health
Director, Center for Outcomes Research at the Value Institute
Christiana Care earns Training Top 125 honors

A multidisciplinary team from Christiana Care received the Training Top 125 Award from Training Magazine for the third consecutive year. The honor recognizes the top organizations around the world in successful training and development programs. Christiana Care’s Learning Institute is designed to inspire learning across traditional department lines and nurture ideas and best practices throughout the health system.

Developing leaders in management

Christiana Care’s Certificate in Healthcare Leadership program is committed to developing the next generation of health care leaders. Sixteen managers completed the program in November 2013. In addition to learning about motivation, stress behaviors, cultural inclusion and other topics, the managers made recommendations on such topics as succession, managing distractions and keeping in touch with remote teams.

LEED prepares residents to lead

A new program for residents and fellows — LEED-R (Leadership Excellence Education-Residents/Fellows) — is developing physician leaders for roles in the changing world of health care reform. The unique model encourages collaboration and enables residents and fellows to immediately apply their new skills to their jobs.

“Residents and fellows face increasing responsibilities and an expectation that they will work collaboratively as members of high-functioning teams and act as leaders to provide value-based care,” said Barbara A. Monegan, director, Center for Transforming Leadership, Christiana Care Learning Institute.
Researchers tailor the human genome

The Center for Translational Cancer Research at Christiana Care’s Helen F. Graham Cancer Center & Research Institute is among fewer than 35 companies and institutions in the world producing designer proteins capable of tailoring genetic material to develop personalized treatments for cancer and other genetic diseases. Transcription Activator-Like Effector Nucleases or TALENs are synthetically engineered to precisely break DNA sequences at targeted sites along the genome. Scientists can use TALENs to change the genetic code by cutting out a gene or ferrying in a new one and then stimulating the cell’s own repair mechanisms to complete the job.

Study measures cost effectiveness of screening reminders

The cost of sending reminder mailings for colorectal cancer screenings is less expensive, but a personal reminder from a nurse navigator is more effective. The April edition of the journal Cancer published a research paper by Christiana Care’s Heather Bittner Fagan, M.D., and Nora Katurakes, MSN, OCN, studying the cost effectiveness of interventions to encourage screenings. They measured the cost of standard reminder mailings and a tailored navigation intervention, which combined mailings with personal follow-up calls by nurse navigators. The standard intervention cost $167 per patient, and the tailored intervention cost $289 per patient. The tailored intervention was significantly more effective in prompting patients to undergo screenings.

Tissue microarray technology boosts research

The Center for Translational Cancer Research at the Helen F. Graham Cancer Center & Research Institute can now produce tissue microarrays or TMAs to spur the hunt for cancer clues from tiny tumor samples preserved for analysis on a single glass slide. The Graham Cancer Center’s Tissue Procurement Center provides fresh tissue samples and access to several thousand banked specimens for research. For Senior Clinical Scientist Jennifer Sims-Mourtada, Ph.D., who is looking for markers of aggressive breast cancers, TMAs can make the process cheaper and faster. “With TMAs we can analyze hundreds of tumor markers using the same set of specimens all at the same time,” she said. This type of rapid throughput analysis can be a game changer in the drive to translate new findings from the lab into clinical practice.

“In addition to excellent care for my cancer, I had access to a clinical trial, an opportunity to help myself and others.”
—Joan Lockett
Newark
Christiana Care pioneers absorbable scaffold trial

Christiana Care is one of a handful of institutions in the region to participate in ABSORB III, the first clinical trial in the United States of an absorbable vascular scaffold for patients with coronary artery disease. Unlike traditional metallic heart stents, the Absorb Bioresorbable Vascular Scaffold device opens blocked arteries with a tube made of polylactide, a material commonly used in dissolving sutures. After the device is implanted the body absorbs it, allowing the artery to regain its ability to contract and expand naturally. After the scaffold is absorbed it no longer takes up room in the artery, allowing greater blood flow.

Nationwide DVT trial

Mark J. Garcia, M.D., medical director of the Center for Comprehensive Venous Health at Christiana Care, is lead investigator of a nationwide research study evaluating the use of guided ultrasound and medication for patients suffering from post-thrombotic syndrome, the most common complication that can result from chronic deep vein thrombosis (DVT). The ACCESS PTS (ACCELERATED ThrombolySiS for Post-Thrombotic Syndrome) study is designed to evaluate the safety and efficacy of treatment consisting of ultrasound using the EKOS Corporation’s EkoSonic® Endovascular System along with a clot-busting drug called recombinant tissue plasminogen activator or r-tPA. Christiana Care’s Center for Heart & Vascular Health is one of only 30 study sites in the United States.

A leader in clinical trials

Christiana Care is a key participant in two trials with the potential to benefit people with heart disease. The first trial focuses on the safety and efficacy of the Nellix™ EndoVascular Aneurysm Sealing System (EVAS) to treat abdominal aortic aneurysms, or a “ballooning” of the aorta, the body’s main artery. EVAS couples the placement of the stents with special endobags surrounding the stents. The endobags contain a polymer material to protect the aorta while excluding and sealing the aneurysm from blood flow.

Christiana Care also is participating in the Fourier clinical trial that investigates a different approach to reducing LDL cholesterol, or “bad” cholesterol, with a new drug. When compared to placebo, the medication may reduce the risk of cardiovascular events in people who have experienced a prior heart attack or stroke and have high cholesterol.
MRI measurements identify at-risk infants

Volumetric MRI measurements taken at birth can help identify preterm infants at risk of neurodevelopmental disability, according to research by Christiana Care and the University of Delaware. The National Institutes of Health funded the study, which was published in Pediatric Physical Therapy. Infants born before 32 weeks gestation have a high risk of developmental delay. Detection at birth of cerebral injury would allow families to seek early intervention.

Genetics studies show promise of less-invasive tests

Many expectant mothers are reluctant to undergo testing for chromosomal abnormalities via amniocentesis or chorionic villus sampling because of risks to the fetus. Christiana Care researchers contributed to two recent studies showing the efficacy of using chromosomal microarray analysis, a test used to detect chromosomal imbalance, or massively parallel sequencing of maternal plasma DNA, another diagnostic tool, to diagnose fetal aneuploidy, or an abnormal number of chromosomes. The goal is to avoid more invasive diagnostic procedures by studying fetal DNA found in the plasma of pregnant women.

Fetal adrenal gland study explores marker for prematurity

Researchers at Christiana Care are examining whether ultrasound measurement of the fetal adrenal gland can accurately predict preterm birth. Led by Matthew K. Hoffman, M.D., MPH, FACOG, vice chair of the Department of Obstetrics and Gynecology and the Division of Education and Research, researchers at eight centers are examining whether ultrasound measurement of the fetal adrenal gland can accurately predict preterm birth. Researchers will measure the gland at approximately 28 weeks in about 2,000 women.

Two recent studies have suggested that sonographic measurement of the gland early in the third trimester may accurately predict spontaneous preterm birth.

“If confirmed, this study will help demonstrate that, in fact, the baby sends a key signal to begin its own birth process,” Dr. Hoffman said. The study is sponsored by the NIH’s Eunice Kennedy Shriver National Institute of Child Health and Human Development.
Increasing the survival rate of preterm babies around the world

Christiana Care plays a leading role in determining if administering antenatal corticosteroids will improve the survival rate of babies born prematurely in developing countries.

Previous research shows that giving antenatal corticosteroids to women at high risk of preterm birth is the single most effective intervention to reduce neonatal mortality. Corticosteroids given to mothers prior to delivery cause the fetus to speed the production of surfactant, which is often deficient in the lungs of preterm infants. Corticosteroids have been shown to reduce the incidence of Respiratory Distress Syndrome by 34 percent, bleeding in the brain by 46 percent and neonatal mortality by 31 percent.

In developing nations, where access to advanced care is limited, only about 10 percent of eligible women receive this life-saving, inexpensive medication. Richard J. Derman, M.D., MPH, FACOG, the Marie E. Pinizzotto, M.D., Endowed Chair of Obstetrics and Gynecology, is a principal investigator of the National Institutes of Health-funded Global Research Network for Women’s and Children’s Health. He is collaborating with partners at Jawaharlal Nehru Medical College in Belgaum, India.
To recognize the leadership and accomplishments of former Christiana Care President and CEO Robert J. Laskowski, M.D., MBA, physician and servant-leader in health care delivery science, Christiana Care is establishing a research symposium in his honor.

The lectureship reflects Dr. Laskowski’s visionary commitment to the transformation of health care and carries on his legacy of increasing access to expert, respectful care by creating systems of care that patients value.

The annual Robert J. Laskowski, M.D., Lectureship highlights breakthrough research that results in innovative strategies to create greater value. The lectureship will showcase leaders who have influenced value in health care through research, policy, education, advocacy or clinical advancement.

In leading Christiana Care, Dr. Laskowski created a breakthrough approach to health care that resonates throughout Delaware and the nation, developing a more meaningful and patient-centered concept of health care value.

As president and CEO of Christiana Care from 2003 to 2014, Dr. Laskowski anticipated the vital importance of increasing the value of health care delivery for the benefit of patients, health providers and society. Through measurable, value-based care, health professionals can improve the experience, efficiency and effectiveness of health care for patients and their families, creating healthier communities and a healthier world.

Dr. Laskowski piloted a strategy that has firmly established Christiana Care as a trusted and valued community health care resource with a national reputation for quality, safety and innovation. He achieved this aim while remaining highly focused on Christiana Care’s mission of service as a not-for-profit health system.

For more information, call the Office of Development at 302-327-3305 or email developmentoffice@christianacare.org.
The word “value” is part of many discussions about health care. For more than three years, the Value Institute at Christiana Care has led research efforts to define value and to deliver value to patients through innovative, effective, affordable systems of care.

“We have a very specific and more nuanced approach to value,” said former Christiana Care President and CEO Robert J. Laskowski, M.D., MBA, who established the Value Institute in 2011. “It is listening to the people that we’re privileged to serve and asking them ‘what’s good for you?’ and then bringing our caring, our compassion and our expertise to fuse the science and the humanity, which is the very core of medicine, to help people live the lives that they want.”
The Value Institute’s mission is to develop, deliver and evaluate innovative solutions that meet the goals of improving the patient experience and enhancing population health at an affordable and sustainable cost.

Sharing knowledge has been integral to the Value Institute’s efforts. In September 2013, the Value Institute’s symposium on palliative care “End-of-Life Care in America: A Clinical and Public Policy Perspective” featured national experts Diane E. Meier, M.D., FACP, founder of the Hertzberg Palliative Care Institute at Icahn School of Medicine at Mount Sinai Medical Center and David J. Casarett, M.D., MA, director of Hospice and Palliative Care at the University of Pennsylvania Health System, and internal specialists in the field. The symposium explored a holistic palliative care that goes beyond end-of-life care.

The Value Institute Academy, the educational arm of the Value Institute, expanded its array of in-person and web-based course offerings. Courses, some offered for continuing education credits, aim to maximize individual and team abilities to innovate and lead change and drive scientifically based improvements in health care delivery.

In May, the spring symposium “Bridging the Gap: Connecting Data to Decisions” celebrated the Value Institute’s three years of accomplishments and also looked toward the future.

“We are focused on performing pragmatic, innovative research to create safe and effective health care programs,” said Timothy J. Gardner, M.D., executive director of the Value Institute.

Presentations from clinical innovators at Christiana Care included:

- A program to reduce patient falls.
- How the electronic health record might create more cost-effective and flexible staffing models.
- Efforts to improve care of patients on ventilators.

“THE GOAL IS TO MAKE SURE EACH CARE POLICY REPRESENTS BEST EVIDENCE AND IS INFORMED BY SCIENCE.”
— Eric V. Jackson, Jr., M.D., MBA
Director, the Center for Health Care Delivery Science
Associate Director, Value Institute

“It’s important that research to improve how we treat patients happens collaboratively with those who understand the care processes the best.”
— Seema S. Sonnad, Ph.D.
Director, Health Services Research, Value Institute
Seema S. Sonnad, Ph.D., director of Health Services Research for the Value Institute, explained that these examples of innovative quality improvements highlight how hands-on collaboration between researchers and frontline staff is critically important to driving positive innovative change.

“It’s important that research to improve how we treat patients happens collaboratively with those who understand the care processes the best,” Dr. Sonnad said. “A real-world setting for research that uses rigorous academic standards is important to developing and disseminating solutions.”

The directors of the four centers within the Value Institute discussed their areas’ work and progress in leading the way to better health, better care and better value.

Updating attendees on initiatives at their centers were: Vernon Alders, MHCDS, MBA, MSW, director of the Center for Organization Excellence; Sharon Anderson, MS, BSN, RN, FACHE, director of the Center for Quality and Patient Safety; William S. Weintraub, M.D., director of the Center for Outcomes Research; and Eric V. Jackson, Jr., M.D., MBA, director of the Center for Health Care Delivery Science and associate director of the Value Institute.

For Dr. Jackson, the overriding principles of an equation that yields value in health care are population health, patient-centeredness and affordable, high-quality care.

“We need to look at how we are delivering and coordinating care,” he explained.

Data drives evidence-based, best-practice decision-making with the patient at the center to produce policies and protocols to deliver high-reliability medicine.

“The goal is to make sure each care policy represents best evidence and is informed by science,” said Dr. Jackson. “Data drives everything — recognizing that data don’t tell the whole story — but the data positions us to be closer to the source of the truth.”

Dr. Laskowski explained that at Christiana Care value is the core principle.

“Value is our strategy,” he said. “It is the fundamental strategy we have for service. Value is service and care that make a measurable difference in people’s lives in ways they appreciate and society can afford.”
**SYSTEM STATISTICS** *(FISCAL YEAR 2014)*

**ADMISSIONS**

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**AVERAGE INPATIENT STAY (DAYS)**

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**EMERGENCY DEPARTMENT VISITS**

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**BIRTHS**

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**CHRISTIANA CARE’S RANKING BY VOLUME IN THE U.S. FOR HOSPITAL ADMISSIONS**

**CHRISTIANA CARE’S RANKING BY VOLUME IN THE U.S. FOR EMERGENCY DEPARTMENT VISITS**

**COMBINED VISITS**

- 2010: 165,041
- 2011: 166,945
- 2012: 172,510
- 2013: 173,857
- 2014: 181,237
THE ROCCO A. ABESSINIO FAMILY WILMINGTON HEALTH CENTER VISITS

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<tbody>
<tr>
<td>2010</td>
<td>73,912</td>
</tr>
<tr>
<td>2011</td>
<td>69,901</td>
</tr>
<tr>
<td>2012</td>
<td>74,861</td>
</tr>
<tr>
<td>2013</td>
<td>76,977</td>
</tr>
<tr>
<td>2014</td>
<td>76,908</td>
</tr>
</tbody>
</table>

PRIMARY CARE PHYSICIAN OFFICE VISITS

<table>
<thead>
<tr>
<th>Year</th>
<th>Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>193,677</td>
</tr>
<tr>
<td>2011</td>
<td>194,494</td>
</tr>
<tr>
<td>2012</td>
<td>196,930</td>
</tr>
<tr>
<td>2013</td>
<td>194,653</td>
</tr>
<tr>
<td>2014</td>
<td>193,410</td>
</tr>
</tbody>
</table>

RADIOLOGY PROCEDURES

<table>
<thead>
<tr>
<th>Year</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>317,863</td>
</tr>
<tr>
<td>2011</td>
<td>390,558</td>
</tr>
<tr>
<td>2012</td>
<td>377,137</td>
</tr>
<tr>
<td>2013</td>
<td>381,595</td>
</tr>
<tr>
<td>2014</td>
<td>389,568</td>
</tr>
</tbody>
</table>

SURGICAL PROCEDURES

<table>
<thead>
<tr>
<th>Year</th>
<th>Procedures</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>40,773</td>
</tr>
<tr>
<td>2011</td>
<td>40,220</td>
</tr>
<tr>
<td>2012</td>
<td>39,827</td>
</tr>
<tr>
<td>2013</td>
<td>38,453</td>
</tr>
<tr>
<td>2014</td>
<td>38,803</td>
</tr>
</tbody>
</table>

CENTER FOR REHABILITATION

- **659** Rehabilitation Patients

CENTER FOR ADVANCED JOINT REPLACEMENT

- **2,536** Total Knee and Hip Replacements

REHABILITATION SERVICES VISITS

<table>
<thead>
<tr>
<th>Year</th>
<th>Visits</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>131,304</td>
</tr>
<tr>
<td>2011</td>
<td>128,069</td>
</tr>
<tr>
<td>2012</td>
<td>127,622</td>
</tr>
<tr>
<td>2013</td>
<td>116,807</td>
</tr>
<tr>
<td>2014</td>
<td>106,178</td>
</tr>
</tbody>
</table>

HOME HEALTH AND COMMUNITY SERVICES

- **307,172** Home Health Care Visits
- **5,799** Alzheimer’s Day Program Visits

SCHOOL-BASED HEALTH CENTERS

- **15** Christiana Care Staffs
- School-based Health Centers in Delaware, the total number of visits is **21,585**
**SYSTEM STATISTICS** *(FISCAL YEAR 2014)*

**TOTAL OPERATING REVENUE** *(BILLIONS OF DOLLARS)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Revenue</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>$1.27</td>
</tr>
<tr>
<td>2011</td>
<td>$1.32</td>
</tr>
<tr>
<td>2012</td>
<td>$1.38</td>
</tr>
<tr>
<td>2013</td>
<td>$1.44</td>
</tr>
<tr>
<td>2014</td>
<td>$1.56</td>
</tr>
</tbody>
</table>

**CHARTER CARE** *(MILLIONS OF DOLLARS)*

<table>
<thead>
<tr>
<th>Year</th>
<th>Charity Care</th>
</tr>
</thead>
<tbody>
<tr>
<td>2010</td>
<td>$28.0</td>
</tr>
<tr>
<td>2011</td>
<td>$27.2</td>
</tr>
<tr>
<td>2012</td>
<td>$26.5</td>
</tr>
<tr>
<td>2013</td>
<td>$26.8*</td>
</tr>
<tr>
<td>2014</td>
<td>$27.0**</td>
</tr>
</tbody>
</table>

**COST COMPARISON OF AVERAGE PATIENT STAY**

<table>
<thead>
<tr>
<th>Hospital</th>
<th>Average Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johns Hopkins</td>
<td>$11,487</td>
</tr>
<tr>
<td>HUP</td>
<td>$10,957</td>
</tr>
<tr>
<td>Jefferson</td>
<td>$10,844</td>
</tr>
<tr>
<td>Temple</td>
<td>$9,682</td>
</tr>
<tr>
<td>Crozer</td>
<td>$8,611</td>
</tr>
<tr>
<td>Christiana Care</td>
<td>$7,996</td>
</tr>
</tbody>
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**CHRISTIANA CARE HEALTH SYSTEM OPERATING DOLLAR**

- Therapeutic & Diagnostic Services: 0.28
- Nursing Services: 0.32
- Employee Benefits: 0.23
- Medical Education & Social Services: 0.15
- Facilities & Services: 0.07
- Support Services: 0.08
- Depreciation & Interest: 0.06
- Administration: 0.04
- Insurance & Other: 0.01
- Other Affiliates: 0.01

**CHRISTIANA CARE’S FINANCIAL IMPACT ON THE REGION**

- **$28.8 MILLION PAID IN TAXES TO DELAWARE**
- **$100,000 ON AVERAGE THE AMOUNT RETURNED TO DELAWARE’S ECONOMY BY EACH EMPLOYEE**

**1,202 VOLUNTEERS GAVE 88,968 HOURS WHICH TRANSLATES TO $2.006 MILLION DOLLARS OF MAN HOURS**

**SYSTEM STATISTICS** *(FISCAL YEAR 2014)*

**TOTAL OPERATING REVENUE** *(BILLIONS OF DOLLARS)*

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