

FOCUS

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Focusing on the people and initiatives that distinguish Christiana Care Health System

INSIDE

10
VOLUNTEERS
Annual celebration honors
Christiana Care's volunteers

14
WALK THE WALK
Indoor fitness trails make
it easy to get steps at work

16
OASIS ROOM
Project creates safe space
for staff to de-stress at work



Christiana Care recognized for multiple sclerosis care

For integration of medical, psychological and rehabilitative care to meet the complex needs of patients with multiple sclerosis, Christiana Care has earned a first-in-Delaware recognition that puts it among the top tier of MS programs nationwide.

CONTINUED INSIDE



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Photo: Jason M. Silverstein, D.O., here with the team from the Center for Comprehensive MS Care, helps patients with Multiple Sclerosis access coordinated services that take patients' medical and nonmedical needs into account.

MULTIPLE SCLEROSIS CARE | CONTINUED

Christiana Care has been designated a Center for Comprehensive MS Care by the National Multiple Sclerosis Society, which recognizes providers that offer a multidisciplinary model of care. Patients at these centers have access to coordinated services that take patients' medical and nonmedical needs into account.

This milestone was achieved in large part due to the work of Jason M. Silversteen, D.O., who joined Christiana Care in 2010 as a neurology specialist and neurology education coordinator with the Internal Medicine Residency Program.

"We wanted to build a model that comprehensively cares for this unique population of patients," Dr. Silversteen said. "The focus was to address all of the medical needs and, just as importantly, the nonmedical needs that these patients have."

People with multiple sclerosis experience a wide array of symptoms, both physical

and mental, as their immune system wears away at the protective sheath around neurons. The disease is only rarely fatal but can cause debilitating symptoms that strike without warning.

For Shareba B. Waters of Middletown, multiple sclerosis symptoms include fatigue and a painful, severe stiffness that freezes an entire leg. Pain management treatment and physical therapy at Christiana Care have helped Waters to pursue her goals, including a doctorate in behavioral health.

She noticed a difference in her care during her first visit with Dr. Silversteen in 2011.

"He was compassionate and concerned," said Waters, 44. "It was such a breath of fresh air — I had never been with a doctor like him before."

Kert Anzilotti, M.D., MBA, physician leader in the Neurosciences Service Line and chair of the Radiology Department,

said "when you bring on someone like Dr. Silversteen, with specialty training and an interest in the field, then you can take the care model to the next level."

The community has benefited from Dr. Silversteen's impact.

Kevin Moffitt, president of the Greater Delaware Valley Chapter of the National Multiple Sclerosis Society, said Dr. Silversteen, who serves on the chapter's health care advisory committee, is well known in the region for how much he cares about patients.

"He takes his time, and he's incredibly knowledgeable," Moffitt said. "He's one of the leaders in this field in our area."

Dr. Silversteen began building his team by adding a physician assistant within a few years of his arrival, followed by a nurse to manage medication and another to coordinate research. Because depression is a common symptom of multiple sclerosis, a behavioral health nurse is embedded within the program to provide in-house counseling and referrals to psychiatrists.

He created relationships with community providers, as in the case of a private physical therapy practice downstairs from his office. The practice worked with Dr. Silversteen to certify one of its therapists in MS care. A nutritionist also works with his patients once a month.

Aggregating providers and services is a key strategy to care for his approximately 1,300 patients, who comprise half of all multiple sclerosis patients statewide. His overall goal is to help them live full lives while reducing hospitalizations and infection rates.

CONTINUED

"We wanted to build a model that comprehensively cares for this unique population of patients. The focus was to address all of the medical needs and, just as importantly, the nonmedical needs that these patients have."

JASON M. SILVERSTEEN, D.O.



Patients with multiple sclerosis have access to a multidisciplinary model of care under Jason M. Silversteen, D.O., medical director of the Center for Comprehensive MS Care, who sees a patient here along with Amy Benton, a social worker who specializes in caring for patients with MS.



“When you bring on someone like Dr. Silversteen, with specialty training and an interest in the field, then you can take the care model to the next level.”

KERT ANZILOTTI, M.D., MBA

About a year ago, the team added a critical piece to that puzzle. Amy Benton is a part-time social worker whose position is funded by the MS Society.

Like many social workers, Benton has many roles. She assists patients with insurance issues and helps them navigate the U.S. Social Security Administration. Benton, who has worked for Christiana Care for almost 15 years, also counsels patients and supports their caregivers.

“She’s crucial to help with the nonmedical needs of patients ranging from disability issues to transportation to insurance,” Dr. Silversteen said.

For example, cognitive impairment is a symptom experienced by about half of multiple sclerosis victims. Especially when paired with fatigue, felt by four in five of those with multiple sclerosis, problems with reasoning and decision-making can put complicated tasks, such as applying for disability insurance under the federal government, out of reach.

“It is beyond frustrating,” he said of such difficulties, “and that is where one of the real values of the social worker has been.”

While applying for disability benefits isn’t a medical issue, it’s in service of the “ultimate goal of improving a patient’s quality of life,” Dr. Silversteen said.

retention issues, which can pose an infection risk. Now, instead of scheduling another appointment, the test can be performed the same day.



Social worker Amy Benton, medical assistant Elizabeth Riley, Dr. Jason Silversteen and Bernie Walsh, RN, review a patient’s plan of care at the Center for Comprehensive MS Care.

Meeting the complete needs of patients with multiple sclerosis

Combining visits is time-saving for all patients but is especially important for those with a variety of medical needs.

“There are many patients who are extremely symptomatic and very complex,” Dr. Silversteen said. “Ideally, you want multiple providers to see them in the same day. All these providers see the patient, give their assessment and input and we get together as a team to review the case, talk about a care plan and enact it.”

Dr. Silversteen’s multidisciplinary team took years to build. And building a one-stop shop is a goal toward which he and the team continue to move.

The program recently added a bladder-scanning imaging device that uses ultrasound waves. People with multiple sclerosis sometimes suffer from urine-

The program also partnered with John M. Otto, O.D., director of Christiana Care Eye Care, to provide patients convenient access to a state-of-the-art imaging tool called optical coherence tomography, or OCT. The OCT scans the retina and optic nerve to search for evidence of damage from MS not just in the eye, but also in other areas such as the brain. It’s a non-invasive, cost-effective, relatively inexpensive and research-backed diagnostic tool — a rarity in multiple sclerosis care.

Helping patients keep living the life they want

Patient Shareba Waters doesn’t let her disease keep her from volunteer work at church, where she serves as the secretary and organizes a multiple sclerosis club. And her care helps her keep up with her 9-year-old twin daughters.

CONTINUED

MULTIPLE SCLEROSIS CARE | CONTINUED

Waters, who was diagnosed with multiple sclerosis in 2007 after experiencing vision problems, says it was as if, day by day, a gray film descended across her field of vision. Her symptoms intensified after a 2009 fall and broken ankle. In 2011, the year she moved from Philadelphia to Delaware, she began using a cane. She transitioned to a motorized scooter in 2014.

She now goes to physical therapy twice a week at Christiana Care's Preventive Medicine & Rehabilitation Institute.

"Because I don't have as much mobility, we're trying to keep my legs moving as much as possible," she said. "I try to walk every time I'm there."

In 2015, Dr. Silversteen referred her to a physician who implanted a pump that administers a muscle relaxant to combat her stiffness. Waters also recently underwent bariatric surgery.

Ultimately, helping her family has been Waters' biggest motivation. "For me, my driving forces have always been my girls."

Specialized care benefits patients

A general neurologist can treat multiple sclerosis, which is the most common cause of disability among young people in the United States.

However, specialization breeds a familiarity with the nuances of multiple sclerosis. For example, while Dr. Silversteen is not a pain doctor, he's had plenty of experience with multiple sclerosis patients whose pain is their primary problem.

Noting that Delaware has passed legislation that allows patients 18 and older with "certain serious or debilitating conditions" to use medicinal marijuana, Dr. Silversteen said that he's "a big advocate for medical cannabis because, No. 1, it's safer than opiate medications and, No. 2, I've seen the success with using medical cannabis."



John M. Otto, O.D., director of Christiana Care's Eye Care Department, screens patients with a state-of-the-art imaging tool called Optical Coherence Tomography.

This degree of specialization also allows Christiana Care to participate in drug trials, giving patients access to experimental medication. The program is participating in about a half-dozen such trials at any time. "Our research nurse is crucial to make sure they run smoothly," Dr. Silversteen said.

This is an exciting time for MS research. More than a dozen medications are now available to treat multiple sclerosis. The first drug to treat progressive multiple sclerosis, the form of the disease in which symptoms worsen steadily, was approved in March by the U.S. Food and Drug Administration.

The biggest driver toward the adoption of a comprehensive care model is the patient, Moffitt said. Now, patients who search for the highest-quality providers on the advocacy group's website will

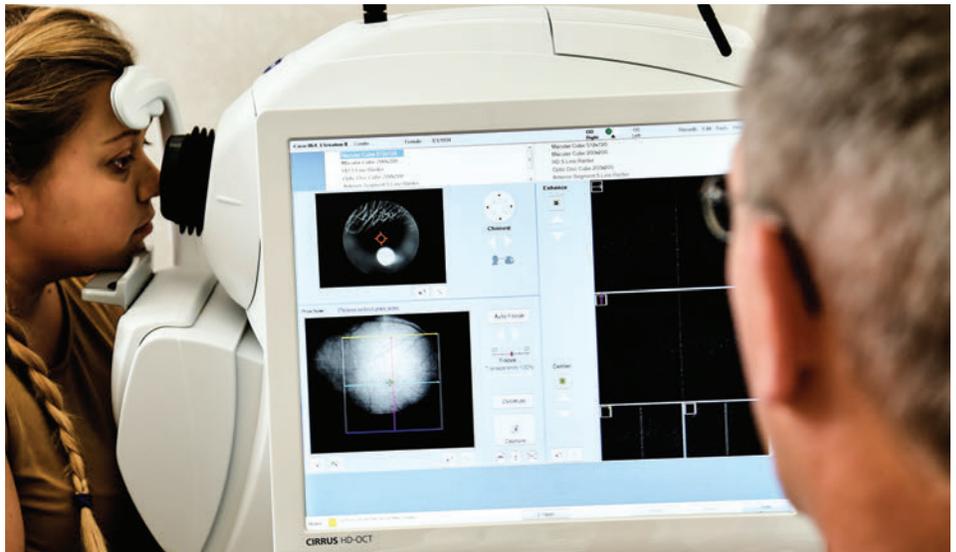
discover Christiana Care's Center for Comprehensive MS Care.

"More and more patients are demanding it," Dr. Silversteen said. There are two other Centers for Comprehensive MS Care in the Philadelphia region, but fewer in other parts of the country. The biggest barrier to providers is cost, Moffitt said.

"It's not something you make a lot of money from. We even have trouble getting neurologists to specialize in MS," he said.

These headwinds make finding providers willing to adopt a comprehensive care model all the more important.

"It's the expertise and passion of Dr. Silversteen — but the support of the institution itself, Christiana Care, is equally important," Moffitt said. "We want to give as many people as possible access to the highest level of care because the needs of people living with MS are so complex. When you can have the medical, psychological and rehab services delivered in one place, that makes such a huge difference." ●



Optical coherence tomography scans the retina and optic nerve to search for evidence of damage from MS in the eye and in other areas, such as the brain.

Community partners help us to make an impact on health

By **Omar Khan, M.D., MHS, FAAFP**, Physician Leader, Primary Care & Community Medicine Service Line
Medical Director, Community Health & Eugene DuPont Preventive Medicine & Rehabilitation Institute



At Christiana Care, everything we do begins with “we serve.” These are the first words of The Christiana Care Way, and they especially resonate as we engage with our neighbors as partners to help them achieve optimal health.

As a health system with deep roots in our region, the importance of community is in all we do. Through community engagement, we partner with our neighbors to understand their needs and to develop approaches to care and programs that meet those needs. Some recent examples:

Diabetes clinical pathway: When the Primary Care & Community Medicine Service Line embarked on developing the diabetes pathway, we immediately engaged those who would be most affected — patients. Including members of the community we serve provided valuable insights, such as how to explain critical health information; the cultural appropriateness of diet advice; even the definition of serving size. By synthesizing this feedback into the final recommendations, our pathway held even greater potential for success. Since its inception, we have demonstrated improvement in our diabetes-related metrics across the service line.

Long-acting reversible contraception (LARC): We are among the largest health systems in the country to engage deeply in universal access to reproductive health counseling and methods in our primary care practices. We focus specifically on LARC in partnership with Upstream, a community organization with a focus on preventing unintended pregnancy, which in turn ensures healthy childbearing. Through a multi-year engagement, we have educated ourselves and our patients on the variety of LARC choices available. We worked as a team — across the health system, with patients and community partners — to provide the best and most effective methods to those we serve. Upstream assists us through education, training and in some cases funding for uninsured patients.

Camp FRESH: This highly successful program is an excellent example of “it takes a village.” Now in its 10th year at Christiana Care, this homegrown community health program serves under-resourced communities year round. During the summer, we provide an enjoyable and educational environment to more than 50 local high-school students, focusing on healthy eating, active living, reproductive health and life skills. Community partners including the Wilmington Police Department, the YMCA and Bellevue Community Center collaborate with us to teach

violence prevention, provide drug and alcohol education, and offer use of athletic facilities such as their basketball court.

School-Based Health Centers: As the pioneers in school-based health centers in Delaware, we also participate in running Gay Straight Alliances in all 16 of our centers. These high-school-level safe spaces focus on advocacy and education for equity, mental health, physical health and sexual health. Key partners including the United Way of Delaware provide administrative oversight, and several partners such as Big Brothers/Big Sisters of Delaware, Children & Families First and Planned Parenthood of Delaware provide mentoring and education.

Community-based research: We focus on research that matters to our community and that our neighbors value. As one of four lead institutions in the Delaware Clinical and Translational Research program (ACCEL) we help lead an annual conference on community-engaged research. In May at our fourth conference, we addressed behavioral and mental health as the main theme at the recommendation of community partners. Nearly half of the 200 registrants were community members, which is very high for a scientific symposium and exactly the engagement we promote. Representatives from Delaware state government and members of our Community Advisory Council were active leaders and participants.

The keynote session paired a scientist with a community organizer who shared their work addressing depression in African-American communities. During the scientific presentations, the audience heard from community members presenting with their medical/research counterparts on topics they had worked on together. Their presentations included pediatric awareness and sensory motor assessment, autism spectrum disorder, palliative care and reported well-being, participation of youth with disabilities in the Youth Tobacco Survey, happiness in community-dwelling older adults, and the family psychosocial care model for congenital heart disease.

As an example of the spectrum of engagement, the lead panel included community organizer Jim Martin, chair of the Governor’s Advisory Council on Substance Abuse and Mental Health; former Delaware Department of Health and Social Services Secretary Rita Landgraf, now with the University of Delaware; Dr. Gerard Gallucci from Delaware Department of Health and Social Services; and Dr. Mandell Much, medical director for Aquila of Delaware Inc.

As partners with our community, we bring value to the health and well-being of our neighbors through our care, our wellness programs and our research, because we serve together. ●



Mysterious symptoms lead to life-saving care

Neurologist Thomas C. Mueller, M.D., John M. Otto, O.D., Optometry Department head, and Infectious Disease Section Chief David M. Cohen, M.D., worked as a team to diagnose and treat a complicated problem presented by their patient, Wende Yeager.

Wende Yeager is a tough cookie, not easily sidelined. The athletic, energetic 56-year-old has weathered mountain bike crashes, torn ligaments and more with humor and a shrug. So when she developed flu-like symptoms early in 2016, she decided to wait it out.

“I had severe headaches and back pain and was having trouble seeing out of my left eye — my depth perception was non-existent,” said Yeager. “I don’t like to give in to pain, but when I hit a parked car and didn’t even realize it, I knew it was time to have everything checked out. I went to see my primary care doctor and received a referral to see my optometrist.”

She was soon in the office of John M. Otto, O.D., in Christiana Care Eye Care. Dr. Otto found that her eye muscles were misaligned and her optic nerves grossly swollen and hemorrhagic. This very specific clinical situation indicated to him something was happening in Yeager’s skull that could affect her brain.

“The visit suddenly became very serious,” Dr. Otto said. “Wende and I talked extensively about her medical and physical activity histories in the few months leading up to her visit and even going back a bit further. It was important that I understood the symptoms she was having, as well as what she’d been up to before they started.”

CONTINUED

Although Yeager expected to go home that day with a prescription for medication and an order to rest, Dr. Otto instructed her otherwise.

“I decided the best way to know what was going on and to manage the potentially life-threatening situation was to send Wende to the Emergency Department,” he explained. “Within that day, I wanted imaging of her intracranial area to make sure there wasn’t a brain tumor or some bleeding process that could be an immediate concern.”

Yeager’s niece drove her straight to Christiana Hospital. In the Emergency Department, an MRI came back with normal results. Lacking any substantive information on what was causing the optic swelling, the Emergency Department staff admitted Yeager to a room.

In the hospital, her case initially confounded a growing team of clinicians led by Thomas Mueller, M.D., section chief of Neurology at Christiana Care. They ruled out different conditions, including meningitis and a spinal tumor, while Yeager’s condition continued with persistent and dangerous swelling of the optic nerve.

After following numerous clinical clues, imaging of the spinal cord identified a localized infection around her spine, possibly related to a spinal injection many months earlier.

Dr. Mueller consulted Christiana Care infectious disease specialist David M. Cohen, M.D., who prescribed antibiotics, to which Yeager immediately responded. As she recovered at home, her team continued to stay in touch with her and each other.

“Dr. Mueller and I talked every week about her progress and constantly monitored her,” said Dr. Cohen. “We also looped in her outpatient neurologist when needed.”

From start to finish, Yeager’s experience illustrates The Christiana Care Way in action. Drs. Otto, Mueller and Cohen partnered on a complex case to provide expert, compassionate care that their patient definitely valued. Their collaboration was key to delivering the right care at the right time.

“Personal interaction remains important,” Dr. Mueller said about collaboration across clinical specialties. “Direct face-to-face or phone discussion is as key as looking at each other’s notes. Nothing beats it for quality, effective patient care.”

For Yeager, who has recently started getting back to her regular workouts and on-the-move life, her care team’s partnership was nothing short of heroic.

“Each of these guys saved my life — there’s no doubt about it,” she said. ●

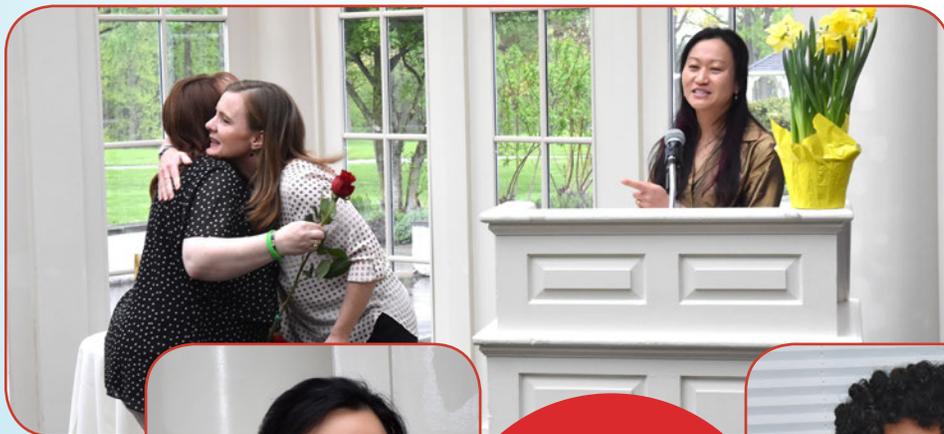


*A year later,
Yeager is back to her
regular workouts and
on-the-move life.*

Kidney donors celebrated at annual recognition event



S. John Swanson III, M.D., chief of Transplantation Surgery at Christiana Care, thanks the men and women who have given the life-saving gift of a kidney.



Stephanie Gillbert, M.D., medical director of the Kidney Transplant Program and Velma Scantlebury, M.D., FACS, associate chief of Transplant Surgery.



Christiana Care celebrated the living kidney donors who have given the gift of life at the annual Living Donor Recognition Brunch, April 22. More than 250 people have received a new kidney through the Christiana Care Kidney Transplant Program.





Shawn Smith,
MBA, vice president
of Patient Experience
at Christiana Care,
welcomed 220 dedicated
hospital volunteers to
an annual banquet.

Christiana Care celebrates ‘exceptional hearts’ of more than 1,400 volunteers

Christiana Care celebrated the extraordinary dedication of hospital volunteers at an April appreciation event at the Chase Center on the Riverfront.

“The number of attendees at the luncheon alone speaks to the commitment of our volunteers who give so selflessly of their time and compassion,” said Rose Wessells, volunteer services manager. More than 200 volunteers attended, in addition to Christiana Care leaders and staff. “Their partnership and dedication to Christiana Care allows us to serve our patients with dignity, care and respect. These extraordinary people deserve to be honored and revered each and every day.”

At the event, 27 volunteers were honored for milestones celebrating their donation of 1,000 to 4,000 hours of service. Eight were recognized as members of the Christiana Care Volunteer Hall of Fame for contributing 10 years of service.

“This year we celebrated and recognized the caring and compassion volunteers provide to others,” said Margarita Rodriguez- Duffy, MSW, CAVS, director, Visitor & Volunteer Services. “We salute you extraordinary people with exceptional hearts. Your unwavering commitment to make a difference in the lives and experiences of others is greatly admired. You recognize the importance of living beyond yourself and sharing your gifts of time, effort and ingenuity with others. Thank you for your dedication and commitment to serve and care for our neighbors.”

In 2017, 1,400 volunteers at Christiana Care provided nearly 80,000 hours of service. That included Christiana Care Cuddlers, who cuddled 483 babies for a total of 458 hours, and 212 Summer VolunTeens who donated time and service during their summer vacation. Volunteers helped 18,000 patients and guests by escorting them to their destinations at Christiana Care’s campuses. ●

THE IMPACT OF VOLUNTEERS:

1,400 volunteers
= **80,000** hours
of service

INCLUDING

483 Christiana
Care Cuddlers

212 Summer
VolunTeens

18,000 patients
and guests
escorted
by volunteers

Delaware Subaru 'Shares the Love' with Christiana Care's NICU



Christiana Care Health System is a grateful beneficiary of Subaru's annual Share the Love event. At a check presentation in May were Elizabeth Zadzieski, M.D., MBA, FACOG, associate physician leader, Women and Children's Service Line; Drewry Nash Fennell, Esq., chief officer of Strategic Communication and Development; Matthew Hoffman, M.D., MPH, FACOG, the Marie E. Pinizzotto, M.D., Endowed Chair of Obstetrics and Gynecology; Andrew Raszewski, district sales manager, Subaru of America, Inc.; David Paul, M.D., chair of Pediatrics and clinical leader, Women and Children's Service Line; Mason Delapp, district service manager, Subaru of America, Inc.; Marilyn Uffner, vice president, AutoTeam Delaware; Katie Loizeaux, of ViaMark; Michael Uffner, president, chairman and CEO, AutoTeam Delaware; April Gambacorta, sales manager, Delaware Subaru; and Lee Asher, vice president and general manager, AutoTeam Delaware.

Families with babies in Christiana Care's Neonatal Intensive Care Unit (NICU) have one goal above all — getting their newborns healthy enough to go home.

A gift from Delaware Subaru is helping the NICU support these families during and after their babies' hospital stay.

Part of Subaru's annual Share the Love event, which designates funds from every Subaru sold between November and January, the \$14,500 donation is for support services in the NICU. The gift marks the second year that Michael Uffner, president and CEO of Delaware Subaru and AutoTeam Delaware, and his team have chosen Christiana Care as one of their Share the Love recipients. This is the second donation to the NICU. In 2016, Uffner and his Delaware Subaru colleagues gave nearly \$10,000 on behalf of Subaru's "Share the Love" campaign.

"The people of Delaware Subaru are as compassionate as they are generous," said David A. Paul, M.D., chair of the Department of Pediatrics at Christiana Care and clinical leader of the Women and Children's Service Line. "They understand that NICU stays can overwhelm families. Through Share the Love, the dealership champions Christiana Care's promise to provide the best clinical care for NICU babies and critical support for their parents and caregivers."

Such support might include education about what to expect while babies are in intensive care and when they first get home,

assistance with special equipment for premature babies during and after their hospital stay, and counseling for parents and siblings during extended stays or when a baby doesn't survive.

"Christiana Care is a pillar across our region," said Uffner, a Christiana Care trustee since 2001 and vice chair of trustees from 2010 to 2015. "Delaware Subaru is proud to have a hand in the important work the health system does for its youngest patients and the people who love them."

Christiana Hospital is the only delivering hospital in the state to offer a Level III NICU. The unit, fully equipped with advanced technology and expert neonatal specialists, averages 1,200 admissions a year. The average stay for a baby needing NICU care is 17 days, and can run from 48 hours to eight months. Patients come from the hospital's delivery room, or the health system's neonatal transport team brings them from area hospitals.

Subaru's philanthropy comes as Christiana Care enhances its Women and Children's services and builds a state-of-the-art facility at Christiana Hospital. Part of this expansion, targeted for completion in 2020, is a new NICU with private rooms that have areas for families to sleep. In keeping with the health system's commitment to family-centered care, plans for the innovative, expanded facility were developed in collaboration with patients and their families. ●

Champions of Service Awards recognize outstanding volunteers



“The Jefferson Awards are inspiring and recognize employees who donate countless hours to the community.”

CHRISTOPHER COWAN

Christopher Cowan, vice president of Human Resources operations, presents the 2017 Christiana Care Health System Jefferson Award nominees and winners.

Dedicated volunteers in our community feed the hungry, maintain parks, advocate for family-centered care and much more.

On April 27, exceptional individuals who make a difference were honored at Christiana Care's Champions of Service Awards reception at the John H. Ammon Medical Educational Center.

“All of you are extraordinary volunteers who have done amazing things in supporting our community,” said Mike Eppehimer, senior vice president of Christiana Care's service line operations.

The Community Hero award went to Amanda Sleeper, Ph.D., who began her volunteer work following a less-than-ideal Neonatal Intensive Care Unit (NICU) experience with her second child. She hoped volunteering would help other NICU parents have a more positive experience.

Sleeper is program chair of the Women and Children's Advisory Council and serves on the Christiana Hospital Patient and Family Advisory Council, the NICU Cuddlers and on various NICU committees focused on patient- and family-centered care and quality improvement.

She and the NICU clinical team earned a Press Ganey Success Story Award in 2014 for improvements in patient satisfaction.

“Community is the key word in our presentation tonight,” said Drewry Nash Fennell, Esq., chief officer of Strategic Communications and Development. “The Christiana Care Community Hero Awards honor ordinary individuals who do extraordinary things to selflessly benefit their community at large.”

In introducing the Jefferson Awards, Christopher Cowan, vice president of Human Resources operations, recognized Patricia Curtin, M.D., who last year was the national winner of the Jefferson Award for Outstanding Public Service. Honored for her humanitarian work in Haiti, the geriatrician was the first Christiana Care employee to earn the national honor.

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Drewry Nash Fennell, Esq., with Amanda Sleeper, Ph.D.

“The Christiana Care Community Hero Awards honor ordinary individuals who do extraordinary things to selflessly benefit their community at large.”

DREWRY NASH FENNEL, ESQ.

“The Jefferson Awards are inspiring and recognize employees who donate countless hours to the community,” Cowan said.

This year, four nominees received local Jefferson Awards:

Patricia Miller, PA-C, is co-founder of the nonprofit Kids Runway for Research, raising more than \$80,000 for childhood cancer research at the Nemours Center for Cancer and Blood Disorders. More than 60 children now model clothes in the Runway for Research fashion show. Miller will represent Christiana Care in the upcoming national Jefferson Awards celebration.



Patricia Miller, PA-C

Jennifer Henry, MSHI, BSN, RN, CEN, SANE-A, leads the Humble Helping Hands Initiative, which provides hot, home-prepared meals, winter coats and school supplies at area shelters and food kitchens.



Jennifer Henry, MSHI, BSN, RN, CEN, SANE-A

Andres Moreira, MHA, has donated more than 2,500 hours to Greenwich Emergency Medical Services (GEMS), a not-for-profit organization that is the sole provider of emergency services to his home town of Greenwich, Connecticut, implementing a bilingual CPR and first-aid program. He is currently serving as senior adviser for the Explorer Post program at Christiana Care and oversees the logistics and operations.



Andres Moreira, MHA

Mary Stephens, M.D., MPH, volunteers with the Down Syndrome Association of Delaware. The mission of this nonprofit is to promote public awareness, education and support for individuals with Down syndrome and their families. The association provides educational and social programming throughout the year, serving people of all ages with Down syndrome and their families, from the prenatal period and beyond.



Mary Stephens, M.D., MPH

It's never too early to start serving others, said Margot Waitz, D.O., director of Osteopathic Education and Adolescent Medicine, introducing the award for Young Person Role Model.

“They recognize early the importance of living beyond themselves and sharing their gifts of time, effort and ingenuity with others,” Dr. Waitz said.



Ariana Gaston

The winner, Ariana Gaston, volunteers with the Student Conservation Association, removing litter and maintaining trails at national parks. One of Ariana's senior projects was working with elementary students to make "blessing bags" of personal hygiene products, socks and more. The bags are distributed to local shelters, as well as to Christiana Care's forensic nursing team to support victims of sexual assault.

The awardees were selected by a volunteer panel of judges. In all, 22 volunteers were nominated. Also honored were Young Person Role Model nominees Janelly Abreu, Michael Flanagan, Meredith Friedland and Varsha Kripalu, Community Hero nominees Beth Emmons, Walter “Sonny” Graham, Tawanda Harbison, Dave Hasse, Nancy Hasse, Barbara Hayes, Gail Heath, Laura Robelen and Barbara Tevebaugh, and Jefferson Awards nominees Jonathan Berrios, Danielle Brown, MSW, and Natalie Dyke. ●

Get moving on indoor Wellness Walking Trails

WELLNESS WALKING TRAIL

WILMINGTON CAMPUS

LEGEND

- FOLLOW THE ORANGE SIGNS
- YOU ARE HERE

POINT A
(EMPLOYEE ENTRANCE | 1st FLOOR)

WATERFALL

HEALING GARDEN

DISTANCE
ONE LOOP (POINT A - POINT A) | .2 MILES

LET'S COMMIT TO BE FIT
WITH CHRISTY CAREGIVER

Employees at Christiana and Wilmington hospitals have access to two new indoor walking trails, with bright orange Christy Caregiver signs showing the way.

“We look forward to partnering with employees to get healthier,” said Chris Corbo, corporate director, Benefits and Wellness. “Our new wellness ambassador, Christy Caregiver, is all about practical ways each of us can work wellness into our days. The walking trail is just another tool.”

Walking does not require extensive training. You don't have to be a gifted athlete to be a good walker. The only equipment you need is a good pair of shoes.

The health benefits of walking are significant. According to the American Heart Association, walking 150 minutes a week — that's 30 minutes, five days a week — increases cardiovascular and pulmonary fitness, reducing the risk of stroke and heart attack.

“The launch of the wellness walking trails were perfect timing as it coincided with Nurses Week,” said Richard G. Cuming, Ed.D., MSN, RN, NEA-BC, chief nurse executive at Christiana Care. “The American Nurses Association has designated 2017 as the ‘Year of the Healthy Nurse’— so let's get walking!”

WELLNESS WALKING TRAIL

CHRISTIANA CAMPUS



DISTANCE
POINT A - POINT B | .5 MILES



LET'S COMMIT TO BE FIT

WITH CHRISTY CAREGIVER



Walking helps to manage hypertension, high cholesterol and diabetes. It also strengthens bones and muscles. Walking is a great stress buster, too. Exercise elevates our mood and helps us to sleep better.

"It's a great thing to do on a lunch break or just when you need a break from the day," said Danielle Broadwater, Wellness Program coordinator. "Employees tell us they want walking to be accessible and fun. This definitely makes it easier for employees to be active."

The Christiana Hospital trail starts at the John H. Ammon Medical Education Center Lobby and extends to Medical Arts Pavilion 2. This trail isn't new, but new signs heighten its visibility.

The new trail at Wilmington Hospital begins in the first-floor atrium by the employee entrance, around the interior perimeter of the healing garden.

Indoor walking trails remove a barrier from walking. It doesn't matter if it's raining or snowing. You can walk in a dry, climate-controlled environment. Shopping malls and some high schools open their corridors to walkers before or after business hours.

"Over the past few years, Facilities & Services has actively participated in the annual Fitness Center challenge," said Bob Mulrooney, vice president of Facilities and Services. "The launch of the updated wellness walking trail is another great way to stay active." ●



OASIS room provides space for MICU staff to refocus and reenergize

The OASIS room on 3E Medical ICU offers caregivers a range of comforts, from a simple lounge chair to a miniature zen garden, to a massage from a high-tech recliner.



“The goal was to create the conditions for the MICU staff to find joy in their work and in doing so improve the experience of providing care.”

HEATHER FARLEY, M.D., FACEP

In the fast-paced Medical Intensive Care Unit (MICU) at Christiana Hospital there is an OASIS — a quiet, tranquil room where staff members can take a few minutes to regroup, refresh and reflect.

“It’s hard to see people suffering,” said Christa Fistler, M.D., a pulmonary intensivist. “The OASIS room is quiet and calming. It allows me to refocus and reenergize so that I can then go back into the unit fresh and ready to work again.”

The concept of creating an OASIS, which stands for Opportunity to Achieve Staff Inspiration and Strength, extends beyond the walls of the room and into the culture of the unit.

The concept itself isn’t new at Christiana Care. For example, the Heart Failure unit SE at Christiana Hospital has an area of an equipment room sectioned off with

curtains that includes a massage chair, soft lighting and a CD player for relaxing music, providing a space for staff to recharge.

“It allows staff the opportunity to step away from the busy unit and take a moment to relax in a comfortable and peaceful environment,” said Lynda M. Huselton, MSN, MSM, RN-BC, nurse manager of SE.

The MICU staff participated in a 12-month initiative designed to build resilience and reduce compassion fatigue and vicarious trauma.

“The goal was to create the conditions for the MICU staff to find joy in their work and in doing so improve the experience of providing care,” said Heather Farley, M.D., FACEP, director of Provider Wellbeing.

CONTINUED



Brooke C. Tadlock, BSN, RN II, CCRN, Christa Fistler, M.D., Lindsey M. Hoosty, BSN, RN III, CCRN, and Carol Ritter, MSN, RN, CCRN-K, CNML, MICU nurse manager, in the 3E OASIS room.

The program was conceptualized by Dr. Farley, Barbara Albani, M.D., Patricia Moore, M.D., and Vanessa Downing, Ph.D. Once the MICU was identified as the target unit, Dr. Farley and Dr. Downing led the development of interventions and mentored the staff to become well-being champions.

A multipronged approach included monthly interactive education sessions, staff-recognition efforts, activities to build camaraderie and identifying OASIS champions in the unit. Interactive sessions focused on fostering individual and team resiliency, covering topics such as dealing with change, healthy conflict, mindfulness and gratitude. Staff also assessed how well they do in meeting their own needs, including exercise, sleep, a healthy diet and fulfilling their intellectual curiosity.

The OASIS room itself is a space that has been transformed to feel far-removed from the hospital. It includes low lighting, a massage chair, a fountain, curtains, a coffee maker, chocolates and a sound machine that replicates soothing rain or waves. Adult coloring books, a small zen garden with a rake and stones and other relaxation tools provide ways for staff to take a mental break and de-stress.

“If we don’t take care of ourselves we can’t take care of our patients,” said Michael Benninghoff, D.O., MS, section chief, Medical Critical Care. “Resilience is a collection of skills that we can cultivate and intentionally apply to help people in high stress roles thrive over the long haul.”

Nurses researched OASIS rooms at other hospitals, as well as evidence-based practices. They also sought input from the staff, displaying a mock-up of the room with post-it notes for suggestions.

“We thought about what we want to go on in the room and what we didn’t want to go on in the room,” said Lindsey Hoosty, BSN, RN, direct care expert. “We knew

that we wanted a place to decompress and recharge. We knew that we didn’t want eating or sleeping.”

Staff members are asked to limit breaks to 15-20 minutes to be thoughtful of their colleagues.

“Nurses are making the time so that other nurses are free to use the room,” Hoosty said. “We are learning to take better care of ourselves and each other.”

The staff continues to refine the space, gathering feedback through a suggestion box, noted Carol Ritter, MSN, RN, CCRN-K, CNML, MICU nurse manager.

“Someone left a note asking if we could install hooks for a jacket, which we did,” she said.

A year after the launch of the initiative, there is a 12 percent decrease in total unit turnover; mean monthly unplanned paid time off is down 18 percent. OASIS is now in Phase 2, with MICU champions leading the initiative. ●

“Resilience is a collection of skills that we can cultivate and intentionally apply to help people in high stress roles thrive over the long haul.”



MICHAEL BENNINGHOFF, D.O., MS

Community Baby Shower promotes safe sleep and healthy families



Christiana Care and community partners came together to provide parents-to-be with tips and knowledge for a healthy start.



Families attending a Community Baby Shower May 4 shared wishes for their newborns' future on a "dream wall" set up in the atrium of Wilmington Hospital. Those dreams, they were told, begin with safe sleep.

Christiana Care's Health Ambassadors program chose safe sleep as the theme for the educational event as part of a community effort to attack Delaware's high infant mortality rate.

"The Health Ambassadors promote health before, during and after pregnancy," said program manager Carla Aponte.

About eight out of 1,000 babies born in Delaware die before their first birthday, compared with a national average of six,

according to state statistics. African-American babies are more than twice as likely to be affected.

Attendees learned the ABC's of safe sleep – infants should sleep alone, on their back, in a crib, in a smoke-free environment. Participants were quizzed: Is it OK for twins to sleep together? What if you're just taking a nap with your baby? Can your newborn sleep with her favorite toy? The answer to all: No.

Safe-sleep habits can be life-saving, reducing the incidence of Sudden Infant Death Syndrome.

More than 100 people attended the event, which included 19 community partner organizations such as Westside

Family Healthcare, the Henrietta Johnson Medical Center and St. Francis Healthcare.

The Health Ambassadors program, funded by the Delaware Division of Public Health, focuses on high-risk communities, where the ambassadors connect pregnant women and young families with health care, social services, education and home-health programs. They hold dozens of events throughout the year, each reaching as many as 500 people.

Sometimes, their work involves addressing basic needs like food, housing and clothing.

"You're not going to worry about having a crib if you don't have a place to live,"

CONTINUED

Aponte said. “You’re not going to educate yourself about breastfeeding if you can’t feed yourself. It’s all about developing relationships in the community.”

Jozell Pettigrew, 23, is expecting a daughter in July to join the year-old son she has at home.

“You’re not alone,” Pettigrew said, referring to how the event made her feel supported. She attends as many Health Ambassadors events as she can and said she wished she had known about the program with her first child. Now, she’s learned so much more about setting her family on a healthy path — like how her breastfeeding newborn will benefit from her own nutritious diet.

Pettigrew’s daughter will be among the more than 6,000 babies Christiana Care delivers this year.

“Our Health Ambassadors are a critical link between the social determinants of health and the clinical care we provide. Here at Christiana Care, we focus on both,” said Omar Khan, M.D., MHS, FAAFP, physician lead for Primary Care and Community Medicine. “Our Health Ambassadors are part of our front line in responding to these community needs.”

In signing the dream wall, expectant mothers were accepting the safe sleep pledge.

Wrote Pettigrew to her daughter:
 “Grow up to be strong and healthy.” ●



More than 100 people attended the Community Baby Shower at Wilmington Hospital.



Grow up to be strong and healthy.

“Some of my best friends are....”

“I don’t think of you as....”

“Where are you really from?”

Diversity education speaker addresses ‘dumb things well-intentioned people say’

Most people have heard these phrases, said Maura J. Cullen, Ph.D. Some people have even said them. Cullen, an expert in diversity education, calls these types of remarks “dumb things well-intentioned people say.”

They also are micro aggressions, defined as small, commonplace verbal, behavioral and environmental indignities, intentional or unintentional, that convey hostility. They all add up in what she calls the Pile on Principle or POP.

“Imagine a lifetime of feeling stepped on,” she said. “Either people explode or they implode.”

Cullen offered practical ways to quickly transform the quality and

effectiveness of interactions in an April presentation at the John H. Ammon Medical Education Center. The event is part of a monthly series sponsored by Christiana Care’s Multicultural Heritage Committee.

She spoke about the complex and varied aspects of diversity, including different age groups, ethnicities and sexual orientation.

“This is about all of us,” she said. “Everyone has a gender. Everyone has a race.”

Cullen said people sometimes make statements intended to be supportive or complimentary but end up being problematic.

“I’m lesbian and at the end of one of my talks a man came up to me and said, ‘Maura, I don’t think of you as lesbian. I think of you as a regular person. I think of you as normal,’” she said.

Cullen said it’s more important to consider the impact of what we say rather than the intention. If well-intended words hurt or offend an individual that pain is still real.

“Impact trumps intent every time,” she said. ●

Visiting speaker Maura J. Cullen, Ph.D., talked about the concept of micro-aggressions and how to avoid them.

Christiana Care hospitals earn Leader in LGBTQ Healthcare Equality designation

Christiana Hospital and Wilmington hospitals have earned 2017 Leader in LGBTQ Healthcare Equality designation, receiving a perfect score on the national Healthcare Equality Index from the Human Rights Campaign Foundation, the educational branch of the nation's largest lesbian, gay, bisexual, transgender and queer civil rights organization. It is the sixth consecutive year Christiana Care's hospitals have received the honor.

This year, Christiana and Wilmington hospitals were among a select group of 302 health care facilities in the nation — and the only hospitals in Delaware — to earn Leader status.

"We are honored by this designation, and it is our privilege to promote an inclusive environment for our patients, their loved ones and our colleagues," said Janice E. Nevin, M.D., MPH, Christiana Care's president and chief executive officer. "This designation is reflective of our promise to our patients and families to be respectful, caring partners in their health."

For 2017, the 10th edition of the Healthcare Equality Index implemented new criteria that raised the bar on what it takes to earn the Leader in LGBTQ Healthcare Equality designation.



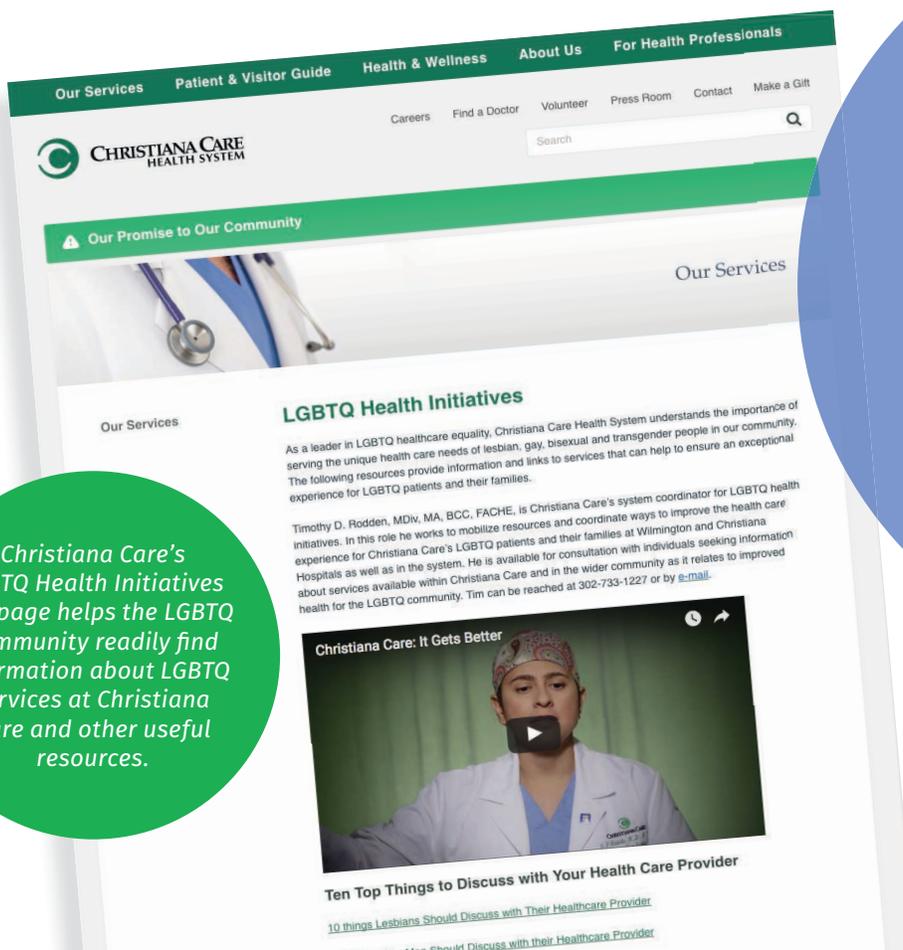
"We are proud of the extensive effort Christiana Care puts forth to receive this designation,"

said Bettina Tweardy Riveros, chief health equity officer at Christiana Care. "Our organization continues to raise the bar in our efforts and is pleased to have earned this recognition."

For the first time, Healthcare Equality Index participants were given scores in four criteria that represent how many policies and best practices from each section they have implemented:

- Foundational elements of LGBTQ patient-centered care.
- LGBTQ patient services and support.
- Employee benefits and policies.
- LGBTQ patient and community engagement.

CONTINUED



Christiana Care's LGBTQ Health Initiatives webpage helps the LGBTQ community readily find information about LGBTQ services at Christiana Care and other useful resources.



"We are honored by this designation, and it is our privilege to promote an inclusive environment for our patients, their loved ones and our colleagues."

JANICE E. NEVIN, M.D., MPH

LGBTQ DESIGNATION | CONTINUED

Participants receiving the maximum score in each section for a total score of 100 points earn the coveted status of 2017 Leader in LGBTQ Healthcare Equality.



“Christiana Care has been a pioneer in LGBTQ health equality,” said Timothy

Rodden, MDiv, MA, BCC, FACHE, director of Pastoral Services and system coordinator for LGBTQ health initiatives.

“We strive to grow our programs and resources to meet the health needs for LGBTQ Delawareans and to partner with others in the state.”

Among the achievements that helped earn 2017 Leader status:

- Christiana Care provides transgender health benefits to employees and their dependents. Christiana Care is the only health system in Delaware to do so.

- Christiana Care's LGBTQ Health Initiatives webpage helps the LGBTQ community readily find information about LGBTQ services at Christiana Care and in the community, and to locate LGBTQ-friendly health care providers, as well as other useful resources.
- A “Transgender Care Guidelines and Resources” best practice tips and guidelines document was created to help clinicians, providers and other staff to provide respectful care to transgender patients and their families.
- Christiana Care produced an "It Gets Better" video as a community outreach tool to help prevent suicide for at-risk LGBTQ adolescents and young adults.

In 2015, Christiana Care formed an LGBTQ Patient-Family Advisory Group that includes people from the community and employees. These advisers help Christiana Care identify unmet needs and work to continually improve quality and provide relevant services. ●

**CHRISTIANA CARE
RECOGNIZED AMONG**

**Becker's 100 Great
Hospitals in America**

For the fourth consecutive year, Christiana Care has been recognized by Becker's Hospital Review as one of the 100 Great Hospitals in America. Hospitals on the list are “renowned for excellence.”

According to Becker's, hospitals making the listing “are industry leaders in innovation, quality patient care and clinical research, and have received recognition across various publications and accrediting organizations.”

To develop the list, the Becker's uses several reputable hospital ranking sources and award agencies such as U.S. News & World Report, Truven Health Analytics, Most Wired hospitals, CMS star ranking, The Leapfrog grades and Magnet designation from the American Nurses Credentialing Center. The list is not a ranking. The website displays hospitals in alphabetical order.

Becker's Hospital Review is a monthly publication offering up-to-date business and legal news and analysis relating to hospitals and health systems. ●

Erin Grady elected chair of the American Board of Nuclear Medicine

Erin Grady, M.D., CCD, FACNM, has been elected to chair the American Board of Nuclear Medicine, one of 24 primary disciplines recognized by the American Board of Medical Specialties. This underscores the growing recognition of Christiana Care's nuclear medicine section as a national leader in the field.

"I am very honored," Dr. Grady said of her new position. "I'm happy to help my specialty and am grateful to have the support from our health system to take on this new role."

Like other primary specialty boards, the ABNM is charged with serving the public through assurance of high-quality patient care by establishing standards of training, issuing initial certification and ensuring continued competence of physicians providing nuclear medicine diagnostic and therapeutic services.

"Working with the board has been incredibly rewarding and, of course, a lot of work. My eyes have been opened to special considerations encountered when writing a good exam question, compiling a quality exam and understanding exam statistics. I have especially enjoyed the teamwork we have on the board," Dr. Grady said regarding her three years of experience with the ABNM.

Timothy Manzone, M.D., JD, CCD, chief of Christiana Care's Nuclear Medicine section, summed up his initial reaction in one word: "Wow."

"This is quite an extraordinary role for someone who is relatively early in her career and a testament to Erin's leadership in the field on the national level," Dr. Manzone said. "We are very fortunate to have her here at Christiana Care."

Dr. Grady is in her sixth year with Christiana Care Health System. She raised her profile in 2013 when she participated in a White

House initiative to ensure a stable supply of the most commonly used radioisotope in nuclear medicine. In 2015, she was named the Rising Star in the department of Radiology.

Dr. Manzone joked that when his professional cohorts learn where he practices, more than one has said, "Oh, you work with Erin Grady!"

"Having somebody who is a national leader in the field really helps put Christiana Care on the map as an institution with a topflight nuclear medicine section," he said.

Christiana Care established its Nuclear Medicine section in 1952, Dr. Manzone said. It's a specialty in which small amounts of radioactive materials, or tracers, are used to diagnose and treat a variety of diseases, including cancers.

"We study how tissues and organs are behaving rather than what they look like," said Dr. Manzone, noting that the specialty is in a phase of transition, making Dr. Grady's new role even more important.

"Nuclear medicine is at a crossroads, and the American Board of Nuclear Medicine is front and center," he said.

Dr. Grady outlined three efforts she wants to accomplish this year with the board: ensure the board is providing value to its diplomates; overhaul the current maintenance of certification process and implement it; and increase communication both inside and outside the board.

"I want to make sure people know about nuclear medicine and are aware of its value in diagnosing and treating disease," she said. ●



Kevin Bailey appointed Rehabilitation Services director



Kevin Bailey, PT, MBA, has been promoted to director of Rehabilitation Services.

Bailey has been a physical therapist for 16 years and a Christiana Care employee for 15 years. He earned a bachelor's degree from Ursinus College, a Master of Physical Therapy from the University of Delaware and a Master of Business Administration with a concentration in health

care administration from Wilmington University. He is currently completing the University of Delaware Certificate in Healthcare Leadership program.

He has been the program manager at the Health Care Center at Christiana since 2006. His responsibilities expanded in 2011 to include management of Stoney Batter Rehabilitation Services.

Bailey recently led the development of the Rehabilitation Services' bundled payment pathway for total knee and total hip replacements. He has been instrumental in leading the initiative to bring dry-needling to Christiana Care's outpatient clinics and coordinating educational opportunities for outpatient rehabilitation services.

He recently was appointed to represent Christiana Care on the Appoquinimink School District Allied Health Program Board of Directors and has represented Christiana Care for two years on the Delaware Orthopaedic Symposium planning committee. ●

Publishing

Roshni Guerry, M.D., and **Linsey O'Donnell.** "Palliative Care Across the Continuum." Delaware Medical Journal. April 2017.

John Goodill, M.D. "Advance Care Planning in the 21st Century." Delaware Medical Journal. April 2017.

Matthew K. Hoffman, M.D., MPH, et al. "A Description of the Methods of Aspirin Supplementation for Pregnancy Indicated Risk Reduction in Nulliparous (ASPRIN) Study." BMC Pregnancy and Childbirth. May 2017.

Anthony Sciscione, D.O., et al. "Maternal Depressive Symptoms, Perceived Stress, and Fetal Growth." Journal of Ultrasound Medicine. April 2017.

Presentations

At the 42nd Annual Oncology Nursing Society Congress. Denver. May 2017:

- **Darcy Burbage, MSN, RN, AOCN, CBCN.** "Innovative Roles in Oncology Nursing: Nurse Navigation."
- **Darcy Burbage, MSN, RN, AOCN, CBCN**
Kathy Coward, BSN, RN, OCN, E.J.
Johnson, Ph.D., MS, MBA, LSSMBB,
Charlene Marinelli, BSN, RN, OCN, Joanne
Antonio, ADN, Tamisha Boone, Tammy
Brown, MSN, RN, OCN, NEA-BC, Michelle
Burke-Kelly, PA-C, Melissa Donovan,
and **Shannon Hostetter, BS.** "Optimizing the Christiana Care Breast Cancer Nurse Navigation Program Using a Lean Six Sigma Approach."
- **Ginny Pugh, BSN, RN.** "Implementing Optune in a Radiation Oncology Department."
- **Trudy Thomas, BSN, RN, OCN, Christine**
Brown, BSN, RN, OCN, Lisa France, ADN,
OCN, Lori Randra, BSN, RN, OCN, Angela
Ross, MSN, RN, OCN, and **Krystle Becraft**
BSN, RN, OCN. "Sustained Reduction of Central Line Associated Blood Stream Infections (CLABSI) on an Inpatient Hematology/Oncology and Bone Marrow Transplant Unit."
- **Angela Ross, MSN, RN, OCN, Krystle**
Becraft, BSN, RN, OCN, Arwen Craig,
MSN, RN, OCN, Kendra Logue, BSN,
RN, and Phyllis Roberts, ADN, OCN. "Implementation of a Quiet at Night (QAN) Initiative on an Inpatient Hematology/Oncology Unit."

At the Pediatric Academic Society Annual Meeting in San Francisco. May 2017:

- **Perri Donenfeld, D.O., Neal Goldstein,**
Ph.D., Stephen Eppes, M.D., Amy
Mackley, MSN, RNC, CCRC, and **Deborah**
Tuttle, M.D. "Temporal Trends and Predictors of Organisms Isolated from the Endotracheal Tubes of Intubated Neonates."
 - **Kaitlin Kenaley, MD, Elizabeth O'Donnell,**
M.D., Monica Castellano, MSPH and
Robert Locke, DO, MPH. "Improving Neonatal Resuscitation in the Delivery Room Using Video Recording."
 - **Margaret Lafferty, M.D., Deborah Tuttle,**
M.D., Stephen Eppes, M.D., Jamie
Hedrick, MBA, Derek Vandersteur, MBB,
Tamie Hotchkiss, RN, Barbara McKinney,
Pharm.D., Gina Moore, BSN, RN, CPHQ,
and **Amy Mackley, MSN, RNC, CCRC.** "Improving the Turnaround Time (TAT) from Order to Administration of First Dose Antibiotics in the Neonatal Intensive Care Unit (NICU)."
 - **David A. Paul, M.D., Elizabeth Igboechi,**
MSN, RNC OB, FNP, NEA-BC, and **Stephen**
Pearlman, M.D. "A Bundled Intervention: Including Pulse Oximetry Prevents Sudden Unexplained Postnatal Collapse."
 - **Deborah Tuttle, M.D.,** et al. "A Phase IIb RCT of Azithromycin (AZM) to Eradicate Ureaplasma Respiratory Tract Infection (URTI) in Preterm Infants at Risk for BPD."
 - **Ursula Guillen, M.D., Amy Mackley, MSN,**
RNC, CCRC, et al. "Randomized Controlled Trial Evaluating the Use of a Decision Aid for Parents Facing Extremely Premature Delivery."
 - **Yukiko Washio, Ph.D., Neal Goldstein,**
Ph.D., Amy Mackley, MSN, RNC, CCRC,
Matthew K. Hoffman, M.D., MPH, Robert
Locke, D.O., MPH and David Paul,
M.D. "Receipt of Antenatal Steroids and Respiratory Support Among Substance-Exposed Premature Infants."
 - **Lisa Strouss, Neal Goldstein, Ph.D., David**
A. Paul, M.D., and **Robert Locke, D.O.,**
MPH. "Vascular Placental Pathology and the Relationship Between Hypertensive Disorders of Pregnancy and Neonatal Outcomes in Very Low Birth Weight Infants."
- At AcademyHealth Annual Research Meeting. New Orleans. June 2017:
- **Holly Archinal, BA, Sarahfaye Dolman,**
MPH, MTA, Nicole Harrington, BS,

- **Heather Bittner-Fagan, M.D., MPH,**
Claudine Jurkovitz, M.D., MPH, et al. "Research That Matters: Engaging Chronic Kidney Disease Stakeholders to Identify Patient-Centered Research Questions."
- **Kimberly Williams, MPH, Beverly Wilson,**
MS, Jo Melson, MSN, RN, FNP-BC, Susan
Howard-Smola, JD, MBA, Claudine
Jurkovitz, M.D., MPH, and **Terry Horton,**
M.D. "Nurse Experiences Following Implementation of an Inpatient Opioid Withdrawal Screening and Treatment Protocol."

Appointments

The Professional Advancement Council congratulates the following new RN III nurses:

Jessica Bull, BSN, RN III, CCRN, Kacey
Morgan, BSN, RN III, CMSRN, and
Alexandra Cessna, BSN, RN III, CEN.

The RN IV Panel congratulates **Helen**
Hawrylack, MSN, RN IV, CCRN, upon her promotion to RN IV.

At the 2017 Delaware Academy of Family Physicians Annual Scientific Assembly in April:

- **Lindsay Ashkenase, M.D.,** was elected president of the Academy.
- **Seema Dattani, M.D.,** became the new immediate past president.
- **Karen Antell, M.D.,** was elected vice president.
- **Erin Kavanaugh, M.D.,** was elected treasurer.
- **Paul Yerkes, M.D.,** became a new Junior Board Member of the Academy
- **Omar Khan, M.D., MHS,** and **Heather Bittner Fagan, M.D.,** were named directors-at-large.

Omar Khan, M.D., MHS, was appointed to the education committee of the Consortium of Universities for Global Health board. CUGH is the largest US membership organization dedicated to global health education.

Awards & Achievements

Kaitlin Kenaley, M.D., was awarded the 2017 Meritorious Poster Award at the Eastern Society for Pediatric Research Annual Meeting in Philadelphia.

Margot Savoy, M.D., in April received her fellowship convocation from the American Academy of Physician Leadership. ●

Coming this SUMMER

June 12

VALUE INSTITUTE 2017 SPRING SYMPOSIUM “CELEBRATING FIVE YEARS OF SUCCESS”

9 – 11:30 a.m.

John H. Ammon Medical Education Center

Keynote speaker will be Brent C. James, M.D., MStat, chief quality officer and executive director, Institute for Health Care Delivery, Intermountain Healthcare. Register at <https://events.christianacare.org/event/value-symposium-2017/>.

June 26

11TH ANNUAL CONCEPTS IN RESPIRATORY CRITICAL CARE CONFERENCE

7 a.m. – 3 p.m.

John H. Ammon Medical Education Center

This conference will provide respiratory care practitioners and other health care professionals continuing education on cutting edge critical care topics.

Register online at <https://www.eventbrite.com/e/11th-annual-concepts-in-respiratory-critical-care-conference-tickets-31751798484?aff=es2>. Contact Jmixell@christianacare.org with questions.

July 8

FREE BONE HEALTH SCREENING AND CONSULTATION

10 a.m. – 2 p.m.

John H. Ammon Medical Education Center

Two million preventable fractures occur each year, and 50 percent of all Americans over age 50 will have a life-altering fracture. At this health and screening event you can learn how to reduce your risk of having a fracture; learn your risk level based on your personal clinical factors; and talk with peer educators about next steps for taking control of your bone health. Register at www.americanbonehealth.org.

August 5

BIG LATCH ON AND FAMILY FAIR

10 a.m. – 2 p.m.

John H. Ammon Medical Education Center

Join us for Christiana Care's First Annual Latch On Event!

Breastfeeders, chestfeeders, pumpers and hand expressers are welcome. Bring your families and supporters.

Educational activities, refreshments, and fun! Register at parenteducation@ChristianaCare.org

SAVE THE DATE

August 29

**5TH ANNUAL
ADDICTION
MEDICINE
SYMPOSIUM:
OPPORTUNITIES &
CHALLENGES**

John H. Ammon
Medical Education
Center

September 10

**AMERICAN HEART
ASSOCIATION
HEART WALK**

Wilmington Riverfront
815 Justison Street
Wilmington

September 23

**DELAWARE
DONOR DASH**

Nemours Gardens
Wilmington

October 26

**2017 CANCER
SYMPOSIUM**

John H. Ammon
Medical Education
Center

October 28

**DELAWARE
ORTHOPAEDIC
SYMPOSIUM**

John H. Ammon
Medical Education
Center

Learn about upcoming events at Christiana Care and register online at <https://events.christianacare.org/>.



THERAPEUTIC NOTES

Revised Metformin recommendations for adults with renal impairment

Jaelyn M. Seiple, Pharm.D, BCPS

Metformin, a biguanide anti-diabetic agent, is widely accepted as a first-line pharmacologic treatment option by several clinical guidelines for patients with type 2 diabetes. Metformin has been used worldwide since the 1950s but only has been on the market in the United States since 1995 due to the concern of it causing lactic acidosis, a serious and potentially fatal condition. This concern led to conservative recommendations for the use of metformin in patients with chronic conditions such as cardiovascular disease or renal failure which may predispose them to lactic acidosis. The U.S. Food and Drug Administration are requiring that label changes be made to expand metformin's use in certain patients with various degrees of impaired renal function.

The previous contraindications in regards to lactic acidosis on the package insert stated that metformin was to be contraindicated in renal disease or renal dysfunction as suggested by serum creatinine levels > 1.5 mg/dL [males], > 1.4 mg/dL [females]. Epidemiological studies suggest the incidence of lactic acidosis with metformin use is approximately 0.03 cases per 1000 patient-years of exposure². The connection between biguanides and lactic acidosis comes from experience with another biguanide, phenformin. Phenformin was eventually withdrawn from the market in the United States due to it causing a significant number of fatal cases of lactic acidosis.

Several observation studies have found no evidence of an increased risk for lactic acidosis or other adverse reactions with metformin use in patients with renal insufficiency. Published clinical trials, population-based studies, and retrospective case series in the United States as well as in foreign countries indicated that metformin was being used outside of the previous labeling contraindications and had continued to be prescribed to patients with mild to moderate chronic kidney disease. Despite patients being prescribed metformin with serum creatinines above the previously recommended contraindications, the lactic acidosis rates were not observed to have increased. It was also noted that patients who did develop lactic acidosis while on metformin had been shown to be due to disease processes such as sepsis or myocardial infarction.

The FDA has discovered that using serum creatinine as a sole parameter for contraindication of metformin actually underestimates

renal function especially in certain populations such as in African American patients, men, younger patients, and those patients with greater muscle mass. Utilizing the glomerular filtration rate (eGFR) is the best overall index in measuring kidney function. The calculation of the eGFR factors in age, race, gender, and serum creatinine level.

After reviewing the literature, the FDA has modified the labeling requirements on metformin and has made the following recommendations³.

- Before starting metformin, the patient's eGFR should be obtained.
- An eGFR should be obtained at least annually in all patients prescribed metformin. In patients who are at an increased risk of developing renal failure such as the elderly, renal function should be monitored more frequently such as every 3-6 months.
- Metformin is contraindicated in patients with an eGFR below 30 mL/min/1.73m².
- Starting metformin in patients with an eGFR between 30-45 mL/min/1.73m² is not recommended.
- In patients taking metformin whose eGFR decreases below 45 mL/min/1.73m², the benefits and risks of continuing treatment should be assessed. Metformin should then be discontinued if the eGFR falls below 30 mL/min/1.73m².
- Metformin should be discontinued at the time of or before an iodinated contrast imaging procedure is warranted in patients with an eGFR between 30 and 60 mL/min/1.73m²; in patients with a history of liver disease, alcoholism, or heart failure; or in patients who will be administered intra-arterial iodinated contrast. The eGFR should be re-evaluated 48 hours post procedure and metformin should only be restarted if the renal function is stable.

By the FDA lifting the restrictions on metformin use in patients with mild-moderate renal impairment, it will ultimately allow more patients to be prescribed it. Metformin is safe, inexpensive, well tolerated, is weight-neutral, and has a low incidence of hypoglycemia. There is also some evidence to suggest that metformin has been associated in reducing cardiovascular morbidity and mortality. This is pivotal in patients with underlying renal impairment who have diabetes as they are most susceptible to this. ●

References

1. Regulations.gov. Yale University Citizen Petition. <http://www.regulations.gov/#!documentDetail;D=FDA-2013-P-0298-0002> . Published 4/3/13. Accessed 3/4/17.
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Best practice review

BOMB THREATS

Q. WHAT SHOULD I DO IF A BOMB THREAT IS PHONED IN TO MY DEPARTMENT?

- A. If a bomb threat is received by phone:
- Keep calm and DO NOT hang up the phone.
 - Try to keep the caller on the line and utilize the Bomb Threat Checklist Use the Bomb Threat Checklist, Portal > Systemwide > Forms > Bomb threat Checklist.
 - Signal a co-worker to call 911 from a different desk phone; DO NOT use cell phones (radio frequencies may cause premature detonation of the bomb).
 - If a co-worker is unavailable, call 911 as soon as you are able, from a different desk phone.
 - Notify the person in charge of your department or office.
 - Upon arrival, Public Safety will assume responsibility and provide direction.
 - The individual who answered the phone call and the department/practice manager must report to the Public Safety Representative on scene; do not leave until dismissed.

Q. SHOULD I BEGIN TO EVACUATE MY PATIENTS UPON HEARING OF THE BOMB THREAT?

- A. No. Public Safety will provide direction in the event that an evacuation is required.

Q. MY DEPARTMENT IS NOT SUPPORTED BY CHRISTIANA CARE PUBLIC SAFETY, WHAT ACTIONS SHOULD I TAKE?

- A. For those departments that are located off campus and/or not supported by Public Safety:
- Keep calm and DO NOT hang up the phone.
 - Try to keep the caller on the line and utilize the Bomb Threat Checklist.

- Signal a co-worker to call 911 from a different desk phone, DO NOT use cell phones (radio frequencies may cause premature detonation of the bomb).
- If a co-worker is unavailable, call 911 as soon as you are able, from a different desk phone.
- Notify the person in charge of your practice.
- Notify CCHS Public Safety as soon as it is safe to do so. Do not use cell phones while in the facility. If possible, call from another desk phone.
- Evacuate the office following your department Evacuation Plan.
- Upon arrival, the Police Department will assume responsibility and provide direction.
- The individual who answered the call and the department manager must report to law enforcement on scene, do not leave until dismissed.

Q. WHERE CAN I FIND THE BOMB THREAT CHECKLIST?

- A. The Bomb Threat Checklist is located on the portal under "Systemwide," click on "Forms." The checklist is located in the box labeled "Other Forms."

Q. WHEN CAN I RETURN TO MY OFFICE/DEPARTMENT?

- A. The on-scene law enforcement officer in charge will notify you when it is safe to return to your area. ●

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If you have questions about this Best Practice Review, please contact the Content Expert, Public Safety, Lt. Dave Polk: 733-3764; or Emergency Management- Ed Durst: 733-3914; or call the Safety Hotline: dial 7233 (SAFE) from within Christiana or Wilmington hospitals, or 623-7233 (SAFE) from outside.

CHRISTIANA CARE COMPLIANCE HOTLINE



Christiana Care's Compliance Hotline can be used to report a violation of any regulation, law or legal requirement as it relates to billing or documentation, 24 hours a day, 7 days a week. Callers may remain anonymous. The toll-free number is: 877-REPORT-0 (877-737-6780).

✓ *To learn more about Corporate Compliance, review the Corporate Compliance Policy online or contact Christine Babenko at 302-623-4693.*



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Christiana Care and Delta Sigma Theta partner in Empowering Our Sisters

Empowering Our Sisters: Our Journey to Wellness, a health and wellness summit in April at the John H. Ammon Medical Education Center, featured presentations on living with and managing chronic disease, healthy eating and nutrition, and the interconnectivity of mental and physical health.

Participants received free health screenings and information about community resources. The fourth annual event was presented by Delta Sigma Theta Sorority Inc., Wilmington Alumnae Chapter and Delta Outreach and Education Center Inc., and was sponsored in part by Christiana Care Health System.

Christiana Care event advisers included Margot Savoy, M.D., MPH, FAAFP, medical director, Department of Family & Community Medicine, and Velma Scantlebury, M.D., FACS, associate chief of Transplant Surgery. ●



Receiving certificates of appreciation for their support of the Empowering Our Sisters event: Sarah Harrison, MBA, Health Summit Chair, Velma Scantlebury, M.D., Patty Jackson, host, WDAS FM, Margot Savoy, M.D., MPH, Yolanda Henley, M.D., and Karen Bostick, chapter president, Wilmington Alumnae Chapter, Delta Sigma Theta Sorority, Inc.