

FOCUS

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

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Brie Crabill, BSN, RN, puts on gown and gloves as an infection-prevention precaution before entering a patient's room in the Wilmington Hospital intensive care unit. Excellence in patient safety, including protecting patients from hospital-acquired infections, is among the key factors that contributed to Christiana Care's achievement of the Everest Award.

Christiana Care named Top 100 Hospital and Everest Award winner

Christiana Care has again secured a place among the nation's 100 Top Hospitals in the major teaching hospital category by Truven Health Analytics, and is one of only 17 hospitals across the nation to win the 100 Top Hospitals Everest Award for being among the select few to set national benchmarks for the fastest long-term improvement among health systems over the last five years.

"This honor is a very special recognition to every one of our staff — our physicians, nurses, all the people at Christiana Care, including our board and trustees, and our patient and family advisers — who are committed to partnering with those we are privileged to serve," said Janice E. Nevin, M.D., MPH, Christiana Care president and CEO. "This award is a reflection





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JANICE E. NEVIN, M.D., MPH
CHRISTIANA CARE PRESIDENT
AND CEO



CONTINUED

of our steadfast commitment to providing value-driven care that is affordable, high quality and innovative.”

Researchers based the 100 Top Hospitals on public information: Medicare cost reports, Medicare Provider Analysis and Review (MedPAR) data, and core measures and patient satisfaction data from the Centers for Medicare and Medicaid Services (CMS) Hospital Compare website. Hospitals do not apply to be a Top 100 Hospital, and winners do not pay to market the honor.

Only 15 major teaching hospitals earned 100 Top Hospitals ranking. Christiana Care is the only hospital in the entire Philadelphia region — and the only one in Delaware — to make the prestigious list.

Best of the best

According to Virginia U. Collier, M.D., MACP, Hugh R. Sharp Jr. Chair of Medicine, the Everest award mirrors progressive improvements on the core measures monitored internally by Christiana Care’s Clinical Excellence Committee.

“All indicators demonstrate that the multidisciplinary value-improvement teams are taking the responsibility seriously to understand the measures and improve care,” Dr. Collier said. “This award is yet another reflection of the hard work our physicians and staff put into caring for our patients and securing our place among the best of the best.”

The award singles out top hospitals among the nearly 3,000 evaluated for excellence in patient safety, patient engagement, affordability, adherence to clinical standards of care and average patient stay.

“This award is yet another reflection of the hard work our physicians and staff put into caring for our patients and securing our place among **the best of the best.**”

VIRGINIA U. COLLIER, M.D., MACP, HUGH R. SHARP JR. CHAIR OF MEDICINE

For Sharon Anderson, MS, BSN, RN, FACHE, senior vice president for quality, patient safety and population health management and director of the Center for Quality and Safety for the Christiana Care Value Institute, it’s a validation of Christiana Care’s transformative culture of quality and safety that engages the entire organization in improving the care delivered to patients, their families and the community.

“It is the staff on our patient care units, in procedural areas and in physician practices throughout our system who made this achievement possible with their dedication to creating a safe culture, achieving high reliability and leveraging technology to deliver the highest-quality, safest care,” Anderson said.

Commitment to transparency

Diane P. Talarek, MA, RN, NE-BC, senior vice president of Patient Care Services and chief nursing officer, added that the award is the direct result of the outstanding work by Christiana Care’s value-improvement teams — those at the unit level caring for patients and their families every day. A commitment to transparency via unit and population-based report cards, she said, provides a forum for staff to contribute toward improving care.

“We’ve empowered people at the front line to make changes — for example, in making sure patients have the information they need when they leave the hospital to manage their medications and self-care and help avoid unnecessary readmissions,” Talarek said. “Working together, our care is ultimately better.”

Truven Health reports that 100 Top Hospitals outperform their peers by



Mitchell T. Saltzberg, M.D., FACC, FAHA, medical director of Christiana Care's Heart Failure Program, talks with patient Carson Drake at the Heart Failure Clinic at Christiana Hospital. Reductions in readmission and mortality for patients with heart failure are among the measurements that earned Christiana Care a spot among the 100 Top Hospitals. Christiana Care's Heart Failure Program provides education, support and case management to patients even after they have left the hospital.

demonstrating excellence and operating effectively across all functional areas. Based on comparisons between the study winners and a peer group of similar high-volume hospitals that were not winners, Truven found that if all hospitals performed at Christiana Care's level:

- Nearly 126,500 additional lives could be saved.
- Nearly 109,000 additional patients could be complication-free.
- \$1.8 billion in inpatient costs could be saved.
- The typical patient could be released from the hospital a half-day sooner.
- Episode-of-illness expense would be 2 percent lower than the peer median.

The analysis is based on Medicare patients. If the same standards were applied to all inpatients, the impact would be even greater.

Moving the needle

The award recognizes Christiana Care among the 100 Top Hospitals that have achieved excellence in 11 areas:

- Patient safety.
- Patient satisfaction.
- Affordability.
- Post-discharge mortality for heart attack, heart failure and pneumonia.
- Post-discharge readmissions for heart attack, heart failure, pneumonia and hip and knee surgery.
- Mortality.
- Adherence to clinical standards of care.
- Medical complications.
- Average patient stay.
- Profitability.
- Medicare spend per beneficiary.



“It is the staff on our patient care units, in procedural areas and in physician practices throughout our system **who made this achievement possible...**”

SHARON ANDERSON, MS, BSN, RN, FACHE
SENIOR VICE PRESIDENT, QUALITY,
PATIENT SAFETY AND POPULATION HEALTH
MANAGEMENT, DIRECTOR OF THE CENTER FOR
QUALITY AND SAFETY, VALUE INSTITUTE

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DIANE TALAREK, MA, RN, NE-BC
CHIEF NURSING OFFICER
SENIOR VICE PRESIDENT, PATIENT
CARE SERVICES

Ian Campbell, RN, and Kacey Morgan, RN, of Christiana Hospital 5E review the assessment tools for cardiac telemetry monitoring. A new system at Christiana Care has dramatically reduced the use of telemetry when it is not clinically useful, saving \$4.8 million and enabling nurses to spend more time on bedside care.

CONTINUED

Shawn R. Smith, MBA, vice president of Patient Experience, highlighted innovations that are moving the needle on patient experience scores, which are a key component of this award. Examples include Christiana Care’s new partnership with the University of Delaware Lerner College of Business for the nation’s first accredited Patient Experience Academy; new technology that allows nurses and leaders to collect real-time data and address needs important to patients and families on the spot, and a systemwide commitment to embedding patient and family advisers on every patient care committee.

“The tremendous energy around advancing The Christiana Care Way through these initiatives has clearly improved our indicators in patient experience over time,” Smith said. “It starts at the top and permeates throughout the organization. Employees are enthusiastically engaging in these unique opportunities, and holding themselves — and each other —

accountable for providing the safest, best care experience for our patients and their family members. This award speaks to that commitment.”

Continually getting better

According to Thomas L. Corrigan, MBA, chief financial officer, the financial-improvement component of the award stems in great part from the guidance of the Position Review Committee and use of Lean Six Sigma and Juran principles in order to help departments ensure that they have the right staff at the right places and times. In many cases, these efforts are enabling better care at a lower cost.

“More is not always better for the patient,” Corrigan said. “Examples include the nationally recognized redesign of our telemetry ordering process in non-intensive-care settings; participation in the Choosing Wisely initiative, which promotes conversations between patients and their physicians regarding unnecessary tests and



Leaders from Christiana Care Health System and the University of Delaware's Alfred Lerner College of Business and Economics join the inaugural graduating class of the Patient Experience Academy. This innovative partnership is bringing together expertise and best practices from the health care and hospitality industries.

procedures; and reductions in lab tests that help reduce unnecessary care.

"This award from an independent party is clearly a very valued designation. What it really tells me, though, is that the significant changes we are making have resulted in real progress compared to other health systems in the U.S. and improved clinical care for our community."

According to Truven Health, the 100 Top Hospitals is the most comprehensive, rigorous study of its kind, incorporating public data; proprietary, risk-adjusted and peer-reviewed methodologies; and key performance metrics to arrive at an objective balanced scorecard measuring current performance and long-term improvement. ●



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THOMAS L. CORRIGAN, MBA, CHIEF FINANCIAL OFFICER

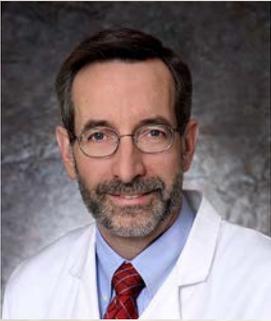
"The tremendous energy around advancing The Christiana Care Way through these initiatives **has clearly improved our indicators in patient experience** over time."

SHAWN R. SMITH, MBA
VICE PRESIDENT, PATIENT
EXPERIENCE



Examining traditions that no longer make sense

By Thomas A. Sweeney, M.D., MMM, FACEP, Associate Chair, Department of Emergency Medicine



For decades, the sound of overhead pages has been a constant throughout both Wilmington and Christiana hospitals, alerting staff from multiple departments who care for heart, stroke and trauma patients when there are patients entering the Emergency Department who need their expert help.

During the day, when there's a swirl of activity in a busy health care system, those pages provide an extra layer of communication to the alerts that are already in place. We need the redundancy to make sure we reach clinicians who have multiple responsibilities.

That is why operators page doctors and other staff through overhead speakers throughout the hospitals, in addition to sending out alerts to their pagers and calling them on their smartphones.

But what about at night? Do we really need overhead alerts when there is less activity and there are fewer physicians and staff in the hospitals?

In the Emergency Department, we started thinking about that question when Christiana Care launched the Quiet At Night initiative.

We know that sleep is extremely important in the healing process. A good night's rest also enhances patient satisfaction, and sounds that interrupt that rest detract from the patient experience.

Overhead pages delivered during the time when the staff throughout the hospital are intent on not making noise struck us as contrary to what we were trying to accomplish through Quiet at Night.

On a busy night, patients throughout the entire hospital might have their sleep interrupted by as many as 10 overhead trauma, heart and stroke alerts.

In addressing those alerts, we noted an opportunity to help patients on every floor, not just the Emergency Department, as respectful, caring partners in their health. That's The Christiana Care Way.

At the same time, we would be better colleagues, partnering with coworkers in other departments to establish a quiet, restful environment.

The Christiana Care Way also means being innovative and patient-centered, challenging the way we have done things in the past in order to create new models of care that provide value for patients and their families.

Thanks to advances in technology, there are quieter, less invasive methods of alerting people who need to respond quickly. In pondering this question, we looked beyond the walls of the hospitals.

Clinicians aren't the only people who must step up when a call goes out. Volunteer firefighters also must move swiftly. And, increasingly, fire departments are retiring their sirens and relying on electronic messaging to alert volunteers.

If firehouses aren't waking up their neighbors at all hours of the night, can we reduce noisy alerts, too? Can we safely stop paging the trauma alerts overhead and let patients sleep?

In the trauma group, we enlisted insights from key stakeholders in our group, as well as the stroke group and heart attack group.

Together, we came to the conclusion that paging overhead alerts at night is a tradition that no longer makes sense. Patients would receive greater value from getting a good night's sleep.

Eliminating overhead alerts at night also would increase our efficiency because it would reduce waste, essentially eliminating a procedure that is no longer useful.

And so we rolled out a new model, halting overhead alerts between 10 p.m. and 6 a.m. The exception is for codes — very high-risk, life-threatening situations that continue to be paged overhead 24 hours a day.

We phased out the other overhead pages in stages — first trauma, then stroke, then heart — so that we could gather feedback from staff as the initiative unfolded.

The response was silence, which was just what we wanted to hear. There were no concerns that emerged regarding patient safety. There were no incidents when a clinician could not be reached without an overhead page.

Further, the initiative provided value for patients without any financial expenditure. We did not have to invest in new technology. We did not have to train staff.

The sole cost was a few common-sense conversations. The result was added value for patients.

That's a good investment. It's also The Christiana Care Way. ●

Christiana Care earns Top 125 Training Excellence Award



Huaiying Gao, Ph.D., director, Content Development; Allen Friedland, M.D., FACP, FAAP, program director, Combined Med-Peds Residency Program; Michelle L. Collins, MSN, APN, RN-BC, ACNS-BC, director, Nursing Professional Development & Education; Angela J. Patchell, MSN, RN, CPAN, staff education specialist; Jan Gibson-Gerrity, MS, BSN, RN, director, Clinical Informatics; Carol Briody, BS, MT (ASCP), CIC, infection preventionist; Rosa M. Colon-Kolacko, Ph.D., MBA, CDM, senior vice president Learning Institute and Chief Diversity Officer; Jason Mallet-Prevost, instructional design technologist; Luz K. Reyes-Laureano, medical laboratory scientist, General Lab; Loretta Consiglio-Ward, MSN, RN, Safety and Quality Education specialist.

Christiana Care has been named to Training Magazine's Top 125 list of outstanding training organizations for the fourth consecutive year. Christiana Care placed in the top 50 on the list of all industries and in the top 10 of health care organizations.

"This award acknowledges the great work of all of our faculty, educators, community outreach and health coaches across the system that help us learn, grow and make a difference in the lives of the patients and families we privileged to serve," said Rosa M. Colon-Kolacko, Ph.D., MBA, CDM, senior vice president of the Christiana Care Learning Institute and chief diversity officer.

Over the past year, the Learning Institute and Christiana Care educators and faculty provided educational sessions in multiple modalities to more than 20,000 employees, physicians and contractors within the system.

Training Magazine recognized Christiana Care for:

- The Leadership Excellence Educational for Residents/ Fellows (LEED-R) program, a two-week elective in which medical residents learn how to be effective leaders. Participants completed a project over the course of six months designed to engage them in key strategic initiatives.
- The Patient Experience Academy, a new venture with the University of Delaware. This 10-week course takes proven customer-service and engagement strategies from the hospitality industry and adapts them to health care settings in alignment with The Christiana Care Way.

- The Language Interpreter Network at Christiana Care (LINCC) education program, designed to identify, assess, train and compensate bilingual employees at Christiana Care in medical interpretation. During the last three months of 2014, the LINCC program provided more than 130 interpretation encounters per month.
- Social learning through mobile technologies such as Train by Cell and Yammer, allowing for the creation of learning communities to enhance retreats and formal education.

"The many and varied learning and development programs for staff and physicians at Christiana Care truly make a difference in the lives of our patients," said Michelle L. Collins MSN, APN, RN-BC, ACNS-BC, director, Nursing Professional Development & Education. "The importance Christiana Care places on these programs sets our health system apart from others."



Training Magazine's Top 125 Award winners are the organizations with the most successful learning and development programs among all industries in the world. The magazine determines the Top 125 ranking by assessing a range of qualitative and quantitative factors, including financial investment in employee development, the scope of development programs and how closely development efforts link to business goals. ●

Monthly multicultural heritage lineup celebrates diversity, promotes inclusion

Are you game to try the Indian favorite, coriander chutney, Korean dak galbi or West African fufu for lunch one day?

Throughout the month of April, Food & Nutrition Services will offer a selection of menu options from various ethnic backgrounds as part of a month-long celebration of diverse cultures that may not otherwise be included in monthly national observances.

It's just one way Christiana Care's new Multicultural Heritage Committee is helping employees, patients and visitors celebrate diversity and promote a more inclusive environment.

Stacy Burwell, a program coordinator with the Christiana Care Learning Institute's Center for Diversity and Inclusion, Cultural Competency and Equity, who serves as committee staff liaison, said the group's work in advancing multicultural appreciation is so important because, "When employees feel respected, valued and empowered, they are more productive and able to provide better care for our patients and their families."

The newly formed committee, which complements work done by three campus-specific (Christiana, Wilmington and VNA) diversity councils, is the most recent step in advancing a systemwide strategy for diversity and inclusion set forth by the Learning Institute in 2009.

"Highlighting different customs, honoring minority groups and celebrating our differences in general enables us to show our patients that not only do we accept their differences; we celebrate them," said committee member Christy Bala, receiving clerk in Wilmington's General Laboratory.

The group meets monthly to develop messaging, educational programming and interactive events to help raise awareness about the various cultures represented throughout Christiana Care. Programs are open to all.

"Everyone who attends these monthly activities will have a greater awareness and appreciation of those they come in contact with," said Cindy Maser, administrative assistant with the Healthy Beginnings Program and the OB-GYN Research Department, and member of the Christiana campus committee.

More than race and ethnicity

Dana Beckton, director of Diversity and Inclusion, has a challenge for anyone who thinks diversity isn't personally relevant.

"Yes, it is! Diversity is more than race and ethnicity," Beckton said. "Diversity refers to the myriad ways we are all unique

and precious — left-handed, right-handed, born in Delaware or not. How boring it would be if everyone were the same!"

By recognizing the strengths we all bring through our various backgrounds, Beckton said, we are better prepared to harness those strengths and be inclusive — widening the circle of acceptance of others to ensure each person feels he or she is a valuable part of the organization.

Working with co-workers with different lifestyles and backgrounds challenges the way we think and interact, said Audrey McLaurin, administrative assistant with Clinical Pharmacy Services, who also represents the Christiana Hospital campus on the committee.

"We may be different on the outside, but we all have similarities. We are here to serve our neighbors. How can we do this if we do not understand their uniqueness?" McLaurin said.

Inclusive workplace, better care

Celebrating diversity and fostering an inclusive environment do more than just make employees and patients feel good, the diversity champions say. It also leads to better care and engaged employees.

"The employee experience is connected to the patient experience," said Rosa M. Colon-Kolacko, Ph.D., MBA, senior vice president of the Learning Institute and chief diversity officer. "When we promote innovation with diversity of ideas, we increase patient safety, reduce medical errors and treat patients as our partners."

Ultimately, she said, in an inclusive workplace, treating patients with respect leads to patient- and family-centered, culturally competent care.

Lauren Mahieu, RN, private duty nurse manager and committee member from Visiting Nurse Association, Camden, shares just such an example of how barriers are removed when staff make the effort to understand patients' unique requests based on culture.

She points out that a patient who refuses respiratory treatments may be observing Ramadan, during which time even inhaled medications violate the fasting requirements. Instead of labeling the patient "non-compliant," she suggests instead asking the physician if an alternative treatment is appropriate while the patient continues to fast.

"By increasing knowledge of various cultures, employees will be better prepared to care for patients with different backgrounds," Mahieu said.

Wilmington committee member Wendy Wintersgill, MSN, RN, CRRN, ACNS-BC, rehabilitation educator for the Center for Rehabilitation at Wilmington Hospital, underscores that scientific evidence cannot stand apart from cultural competence.

“Without understanding the whole person, we cannot make good clinical decisions that will keep people safe and happy with their health care experience. We want patients and their families to be comfortable and feel welcome,” Wintersgill said.

Embracing differences

Maser summed up committee members’ collective goal for a workforce that acknowledges and embraces differences and realizes how special we all are.

“When we care for each other as co-workers and embrace our uniqueness, in turn, we respect and care for our patients in the same manner.” ●

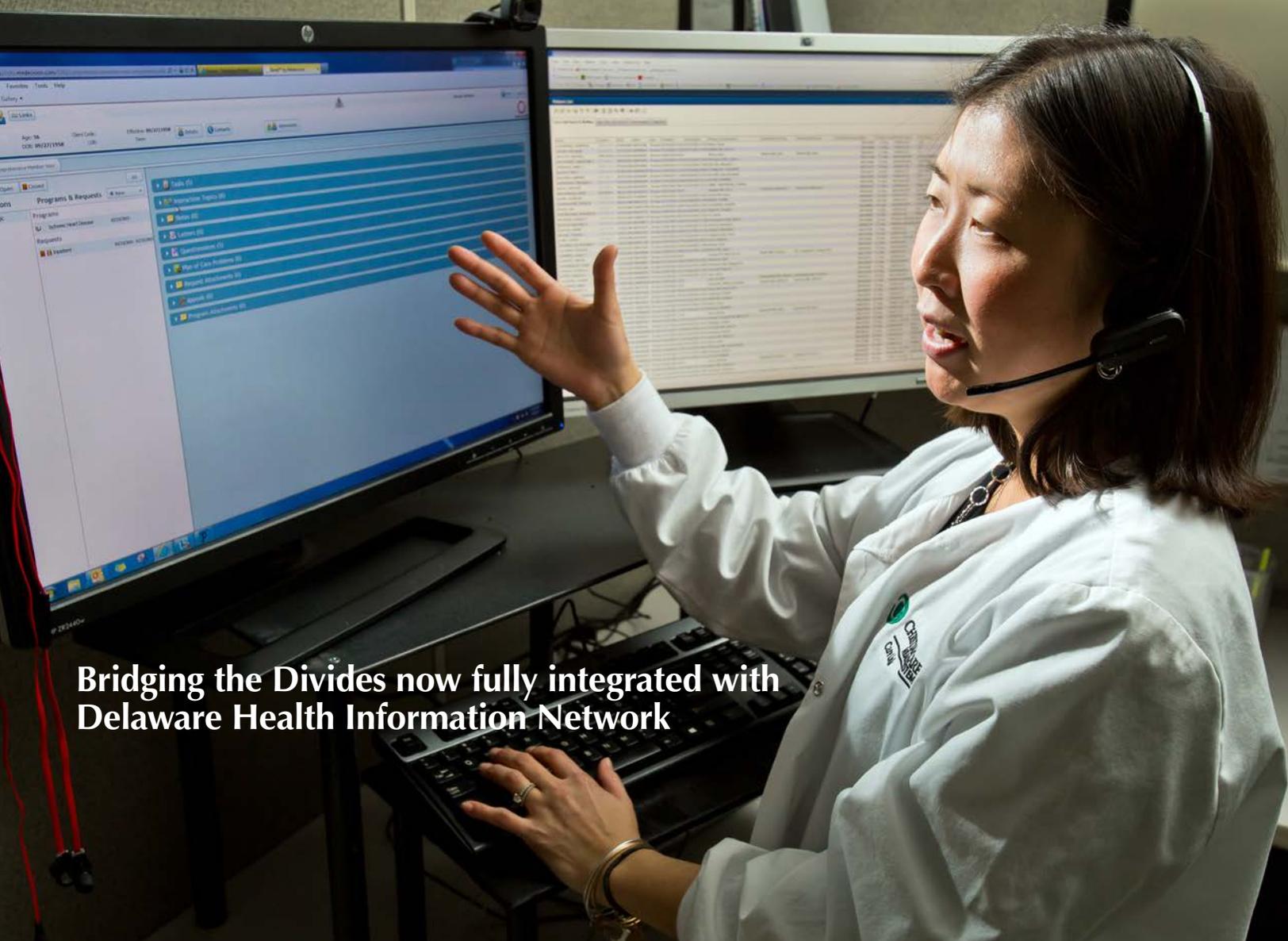
Defining DIVERSITY and INCLUSION: *The Christiana Care Way*

At Christiana Care, our aim is to promote respectful relationships and encounters among colleagues and our patients, and build an inclusive environment that provides patient- and family-centered, culturally competent care. The employee experience creates the patient experience.



Lend your energy to the Multicultural Heritage Committee

Upcoming meetings are April 8 at Christiana Hospital and May 13 at VNA, 1 Read’s Way. Both meetings start at 9 a.m. Contact Stacy Burwell at sburwell@christianacare.org at The Learning Institute for more information.



Bridging the Divides now fully integrated with Delaware Health Information Network

Now that the Bridges program has a full, live interface with the Delaware Health Information Network, Care Link senior social worker Julia Murphy has instant access to medical information on Bridges patients that helps guide her in providing care to patients with ischemic heart disease.

Christiana Care's transformative Bridging the Divides program, which helps patients with ischemic heart disease to transition successfully from hospital care and improve their long-term health, has achieved a historic milestone. The program is now fully integrated with the Delaware Health Information Network (DHIN).

This monumental achievement means that care managers under the Bridges program can obtain instant updates on any new medical information at any time from any one of the 2,000 patients in the Bridges program — in any place within the state of Delaware.

For example, if a patient undergoes a blood draw in Lewes, enters an urgent-care center in Smyrna or visits a specialist in Claymont, care managers with the Bridges program are immediately notified and can proactively make changes to their care plan.

"This is by far the most innovative step in the development of Bridges," said Terri Steinberg, M.D., MBA, chief medical information officer for Christiana Care. "We are now able to act on data that's generated both within our walls and anywhere in the state of Delaware outside our walls."

The Bridges program evaluates Delawareans who suffer from ischemic heart disease, which occurs when the arteries that supply blood to the heart muscle become



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TERRI STEINBERG, M.D., MBA
CHIEF MEDICAL INFORMATION OFFICER

hardened and narrowed. This buildup results in a lack of oxygen or blood flowing to the heart and can lead to chest pain and heart attacks. Over time, ischemic heart disease can weaken the heart muscle and can contribute to heart failure and arrhythmias.

This new milestone in Bridges represents significant progress toward the fundamental goal of the program of achieving medicine’s Triple Aim: better health, better health care and reduced costs.

“This technological breakthrough is vital to the creation of a new standard of care delivery,” said Randall Gaboriault, chief information officer and senior vice president of innovation and strategic development at Christiana Care, and chair of DHIN. “Bridges has now accomplished the goal of advancing information through pioneering technology to enable preemptive intervention in the lives of patients who would otherwise be at risk of readmissions and the costs and disruptions they produce.”

Created through a public/private partnership in 1997, DHIN is the first operational statewide health information exchange in the nation. DHIN creates efficiencies for hospitals, doctors, practices and other health care providers who send and receive clinical information. Because DHIN functions as a data collector for all Delaware hospitals and collects more than 92 percent of lab results statewide, health care professionals already are capable of accessing the most current, critical information on patients.

Bridges is an initiative led by Christiana Care and funded, in part, by a three-year, \$10 million award from the Center for Medicare and Medicaid Innovation (CMMI). Bridges was selected as one of only 107 projects chosen by CMMI from a nationwide pool of 3,000 applications.

Through the project, Christiana Care uses big-data plying technology, powerful enough to tap into all available sources of data — including clinical activity, lab results and pharmaceutical use — on each individual patient to unearth relevant predictive patterns and facts to improve patient care. Christiana Care uses the information provided through this technology to ensure patients can safely transition from acute-care settings to their homes for follow-up care.

The project also uses a care-management technology platform that provides care coordinators with a comprehensive, up-to-date snapshot of each patient’s health status. Care coordinators leverage the accredited clinical content and streamlined workflow through this platform to manage transitions in care, customize treatment plans for individual patients and equip them with the information they need to take control of their own health. ●



“Bridges has now accomplished the goal of **advancing information through pioneering technology** to enable preemptive intervention in the lives of patients who would otherwise be at risk of readmissions... .”

RANDALL GABORIAULT
CHIEF INFORMATION OFFICER,
SENIOR VICE PRESIDENT, INNOVATION
AND STRATEGIC DEVELOPMENT

CTR-ACCEL accelerates research in Delaware



Since 2013, the federally supported program Delaware CTR-ACCEL has advanced clinical and translational research identified as important to the health of Delawareans — cancer, obesity, rehabilitation, cardiovascular disease, stroke, women’s health and infant mortality.

ACCEL is accelerating Delaware research with a \$20 million, five-year grant from the National Institutes of Health to Christiana Care Health System and three research partners: the University of Delaware, Nemours/A.I. duPont Hospital for Children and the Medical University of South Carolina. In addition, the state of Delaware is providing \$5 million and the research partners are jointly contributing \$3.3 million in matching funds.

Through ACCEL, clinicians and investigators with Christiana Care have won grants in each of the core research areas. Support includes:

- **ACCEL Community-Engaged Research:** This is a small-grants program for relatively new research teams to take their initial steps in community-based research. In December at the first ACCEL Community Engagement (ACE) Research Awards, researchers presented proposals pairing community members with investigators. At that time, two research proposals were approved for funding. One brings together staff from the Helen F. Graham Cancer Center & Research Institute, Cancer Support Community Delaware and the Department of Health & Behavioral Nutrition at the University of Delaware to study physical activity and impediments to sustaining activity among cancer survivors. The other, on smoking among disabled youth, is a collaboration of the Center for Drug and Health Studies and the Center for Disability Studies, both at the University of Delaware and the Delaware Division of Public Health, with educators, members of the disability community and public health practitioners.

In the Emergency Department, Ryan Arnold, M.D., MS, (right) clinical investigator in Christiana Care’s Value Institute, has received two Mentored Research Development Awards from ACCEL to study the identification and management of sepsis infections.

- **Mentored Research Development Awards:** With these awards, scholars can spend at least 20 percent of their time during a six-month period on a research proposal, developing it with a sponsoring mentor. A recipient in Emergency Medicine is Ryan Arnold, M.D., MS, clinical investigator in Christiana Care’s Value Institute, who has received two of these grants to study the identification and management of sepsis infections.
- **Pilot Project Grants:** These provide application assistance to investigators with strong potential to receive future NIH funding and helps “pilot out” their idea for a year. For example, David Kahn, D.O., an investigator in neurology and neurological interventional surgery, will study electroencephalograms (EEG) in comatose patients, looking for measures that predict patients able to regain awareness following a coma.
- **Big Data Pilot Grants:** “Large data sets can be assembled and analyzed to look at everything from the value that comes from the mapping of genes to treatment outcomes in specific forms of care,” said William S. Weintraub, M.D., John H. Ammon Chair of Cardiology and the director of the Center for Outcomes Research at the Value Institute. One such grant has gone to Claudine Jurkovitz, M.D., MPH, senior physician scientist at the Center for Outcomes Research. Her goal is to acquire and study data on the delivery of care to Delaware patients with chronic kidney disease.

All these efforts build research infrastructure. Some studies involve Christiana Care clinicians with other Delaware partners, providing examples of collaborative research and community engagement, said Michael Rosenthal, M.D., chair of Family & Community Medicine at Christiana Care and ACCEL’s leader for community engagement and outreach.

“As we gather data on issues of concern for our communities, we will better assess what treatments are working well and where we need to look for new answers,” Dr. Rosenthal said.

A recently approved research pilot project led by Christiana Care and the University of Delaware will evaluate the effectiveness of Wise Guys, a community-based program aimed at preventing teen pregnancy by engaging young men as change agents. Delaware currently has the highest rate of unintended teen pregnancies in the nation. The program curriculum is used in school-based health centers, churches, fraternities and juvenile detention centers. A poster on the Wise Guys project won first place at the ACCEL conference in February.

Though Wise Guys has been running for almost eight years, there have not been measures to effectively judge its success. This research project, led by principal investigator Judith W. Herrman, Ph.D., RN, ANEF, FAAN, of the University of Delaware, aims to change that. Among the Christiana Care researchers collaborating on the project are Brian Rahmer, Ph.D., MS, research program director for Community Engagement and Health Services in Family and Community Medicine and a Value Institute scholar, and Christopher C. Moore, BA, LSSGB, senior program manager in the Center for Community Health, Department of Family and Community Medicine. Moore has been a key administrator of the Wise Guys program.

“ACCEL has provided the opportunity to take a long-time partnership and conduct a study to evaluate effectiveness,” said Moore.

The pilot grant supports incentives for teens to be part of a youth advisory group that will assist in designing new evaluation tools. These young men also participate in focus group discussions and innovative video journaling techniques that will help contribute to the relevance and significance of the evaluation for teens.

“This project is a strong model of partnership in research and represents the kind of community engagement that is so important,” Dr. Rosenthal said. ●



2015 ACCEL COMMUNITY ENGAGEMENT CONFERENCE

“Learning from Each Other: Building Academic-Provider-Community Partnerships for Research”

Monday, May 18, 7:30 – 4 p.m.

Chase Center on the Riverfront, Wilmington

Learn about advances in community-based research and network to discuss possible new research ideas and ways for community partners and researchers to collaborate.

“If somebody has a great idea needing input from the communities that the research affects, this is the place to connect with members of those communities, our research colleagues across ACCEL and clinical care providers,” said conference chair Omar Khan, M.D., MHS, FAAFP, associate vice chair of Family & Community Medicine and co-director of community engagement and outreach for ACCEL.

Keynote speaker is Ann Bonham, Ph.D., chief scientific officer of the Association of American Medical Colleges. One of the leading thinkers on translational research and community engagement, she directs the AAMC’s array of programs that support research and training. Register for this free conference at christianacare.org/events.

Christiana Care clinicians and researchers are among the recent grant recipients for Delaware-CTR ACCEL

Ryan Arnold, M.D., MS, of Emergency Medicine and clinical investigator, Value Institute: “Identifying Effective Therapies in Sepsis”

Daniel Elliott, M.D., MSCE, FACP, medical director, Christiana Care Quality Partners, associate chair of research, Department of Medicine and Value Institute research scholar: “Improving Population Health Through Linked Ambulatory Electronic Health Records”

Jennifer Goldstein, M.D., Internal Medicine and Value Institute scholar: “A Systematic Approach to Patient Engagement in the Discharge Process”

Claudine Jurkovitz, M.D., MPH, senior physician scientist, Value Institute: “Linking Data for Kidney Care”

David Kahn, D.O., Neurology and Neurological Interventional Surgery: “Combining Resting EEG and Event-Related Potentials to Predict Outcome after Coma”

Susan Smola, JD, MBA, senior clinical researcher, Value Institute: “Medical Home Without Walls: Patient Engagement Informing a Randomized Clinical Trial”

Michael Vest, D.O., Pulmonary and Critical Care Medicine: “Energy Balance and Clinical Outcomes of Obese, Mechanically Ventilated Patients in the Intensive Care Unit”

Sandra Weiss, M.D., Cardiovascular Disease and Interventional Cardiology: “Effects of Radial Artery Catheterization on Radial Dimensions and Endothelial Function”

A daughter's kidney donation gives her dad the gift of health



“Watching my father’s health decline was very painful. Watching him get well is the best feeling in the world.”

DANIELLE MCCOY

For more than 30 years, Ray McCoy was a successful banker who felt comfortable with numbers.

But in 2010, when Ray’s kidneys were failing, he looked for a medical team where he wouldn’t be treated like a number.

He found expert, compassionate care at Christiana Care Health System.

“My nephrologist had heard good things about the program from other patients,” he said. “Not only did they get quality care but everyone on the staff is very friendly and caring.”

Ray, who was diagnosed with diabetes in the 1990s, had been coping with gradually worsening kidney disease for years. He grew increasingly tired. He retired from his job at 60, two years earlier than he had planned, because he could no longer keep up with travel demands.

Finally, he began dialysis as a bridge to an eventual transplant.

Ray sat down and talked with his family about his options. He could place his name on the list and wait for a deceased donor, a process that could take as long as five years. Or he could receive a kidney from a living donor, who could be a relative, friend or altruistic stranger.

“Right away, my two children jumped to the plate and volunteered,” he said.

Ray’s son was ruled out immediately because he suffers from high blood pressure. But his daughter Danielle was healthy and enthusiastic about being tested.

Receiving a kidney from a live donor offers several important advantages, says S. John Swanson III, M.D., chief of the Kidney Transplant Program at Christiana Care.

“Dr. Swanson is very warm, a person who will enjoy a chuckle with you and your family. You find that same sense of caring in every member of the team, from the surgeons to the nurses to the social worker and the dietitian. You are a real person, not a number.”

RAY MCCOY

“Long-term survival rates are significantly better with a living-donor kidney compared to a deceased-donor kidney,” Dr. Swanson said. “A kidney from a living donor almost always starts functioning immediately after transplant. A deceased-donor kidney can take a few days to start functioning.”

In addition, transplants from living donors often can be planned when a potential recipient has very poor kidney function but is not yet on dialysis. A preemptive transplant also offers an advantage in long-term survival.

Live donors go through a battery of tests, which provides the transplant team with more information about the donor’s medical history and lifestyle.

Extensive testing benefits the donor, as well as the recipient. Dr. Swanson says donors often gain insights from the evaluation that inspires them to make lifestyle changes to improve their own health.

“Danielle has always been very conscious of what she eats and is very fit,” Ray said. “Still, as her father, I worried about her undergoing surgery.”

But Danielle never wavered in her commitment to help.

“I prayed about it,” she said. “If this is what God wanted me to do, I would be a match.”

She was.

As father and daughter prepared for the transplant, the team at the center worked with them closely, coordinating tests, answering questions and helping Ray to establish healthier eating habits.

“I always enjoyed breakfast meats,” he recalls. “Now they are pretty much off-limits.”

Danielle, 37, is a lawyer who works in Washington, D.C. She appreciated that the staff scheduled her tests on Fridays when she would come home to Hockessin to visit her parents.

“I didn’t have to take extra time off from work or travel back and forth in the middle of the week,” she said.

The transplant process is a stressful time for families. The McCoy’s are grateful for the support of a staff that was always helpful, always upbeat.

“Dr. Swanson is very warm, a person who will enjoy a chuckle with you and your family,” Ray said. “You find that same sense of caring in every member of the team, from the surgeons to the nurses to the social worker and the dietitian. You are a real person, not a number.”

The transplant went smoothly. Father and daughter went home, where the extended family pitched in to care for them.

Danielle was back at work in a few weeks. Over the course of about six months, Ray regained his strength and stamina and is now enjoying an active retirement.

“Watching my father’s health decline was very painful,” Danielle said. “Watching him get well is the best feeling in the world.” ●

Give the gift of a future

Nearly 124,000 men, women and children are awaiting organ transplants in the United States, and the need for tissue is steadily rising.

Each year in April, the National Donate Life Month campaign reminds us that by registering as an organ, eye or tissue donor and celebrating those who have donated, we are bringing new hope to many thousands of people.

April is
National
Donate Life
Month



To learn more about organ donation, visit <http://www.donatelife.net>.

Christiana Care leaders share career reflections in Black History Month panel

Velma P. Scantlebury, M.D., was in fellowship training at the University of Pittsburgh in the 1980s when she taped a three-word note to her bathroom mirror that read: “YES, I CAN.”

To overcome obstacles of gender and race and get to “YES,” Dr. Scantlebury set clear goals for herself. She benefited from mentors. And throughout her journey, she asked herself an essential question: “Is this the best I can do?”

Today, she is the nation’s first African-American female transplant surgeon and associate chief of Transplant Surgery at Christiana Care.

“You need to think about long-term goals and set timelines to achieve those goals,” she said.

In celebration of Black History Month, Dr. Scantlebury and five other successful African-Americans at Christiana Care Health System offered insights on advancement in a panel discussion, “The Currency of Your Career: Understanding What is Needed (Education, Skills, Networks) to Progress to Your Desired Career.” Christiana Care’s Multicultural Heritage Committee hosted the event on Feb. 24 at the John H. Ammon Education Center.

“This is a very special day at Christiana Care as we celebrate Black History Month for the first time,” said Rosa M.

“You need to think about long-term goals and set timelines to achieve those goals.”

VELMA P. SCANTLEBURY, M.D.

Colon-Kolacko, Ph.D., MBA, CDM, senior vice president, Christiana Care Learning Institute, and chief diversity officer. “This event is a wonderful opportunity to learn from each other, promote diversity and inclusion, and advance The Christiana Care Way.”

Edmondo J. Robinson, M.D., MBA, FACP, senior vice president and executive director of Christiana Care, Wilmington, and associate chief medical officer, was born to a teenage mother who earned her nursing degree when he was in college. He was inspired by his uncle, a photographer and entrepreneur, to study hard and look for educational opportunities.



Stacy N. Burwell, program coordinator, Learning Institute; Eric V. Jackson Jr., M.D., MBA, director of the Center for Health Care Delivery Science and associate director of the Value Institute; Edmondo J. Robinson, M.D., MBA, FACP, senior vice president and executive director of Christiana Care – Wilmington and associate chief medical officer; LeRoi Hicks, M.D., MPH, vice chair, Department of Medicine; Rosa M. Colon-Kolacko, Ph.D., MBA, CDM, senior vice president, Christiana Care Learning Institute, and chief diversity officer; Velma P. Scantlebury, M.D., associate chief, Transplant Surgery; Ray Blackwell, M.D.; Kimberly Talley, MSN, RN, CRNP, CNML-BC, FABC, vice president, Patient Care Services, Surgical; Janice E. Nevin, M.D., MPH, president and CEO; Dana Beckton, director, Diversity and Inclusion/Employee Development.

LeRoi Hicks, M.D., MPH, vice chair, Department of Medicine, answers a question during Christiana Care's Black History Month panel discussion.

"I don't believe in serendipity. You make your own opportunities," Dr. Robinson said. "You don't sit around and wait for success to drop out of the sky. You need to have that internal motivation and drive."

Cardiac surgeon Ray Blackwell, M.D., left home at 16 and participated in A Better Chance Program while in a Connecticut high school. The experience transformed his life. He went on to Dartmouth College and Medical School and today is a distinguished surgeon.

"If you are in a system that doesn't work very well, you have to look for other opportunities," Dr. Blackwell said. "Don't let anyone take your dreams."

Kimberly Talley, MSN, RN, CRNP, CNML-BC, FABC, loved working as a bedside nurse. Mentors who recognized her ability to motivate others encouraged her to take leadership classes. Their guidance and advice helped her on her path to becoming vice president, Patient Care Services, Surgical.

"Make sure your most important mentor is someone who is honest with you," Talley said.

Eric V. Jackson Jr., M.D., MBA, the son of college-educated parents, one of whom is an emeritus professor at the University of the District of Columbia in Washington, D.C., grew up surrounded by successful middle-class African-American families. He said the most effective way to climb the career ladder is to perform your best each step of the way up so you will be ready for the next opportunity.



"Finish what you start. Be good to people. Be fully confident in your own ability to succeed."

LEROI HICKS, M.D., MPH

"Focus on being excellent where you are," said Dr. Jackson, director of the Value Institute's Center for Health Care Delivery Science and associate director of the Value Institute. "Chance favors the prepared mind."

"I don't believe in serendipity. You make your own opportunities."

**EDMONDO J. ROBINSON,
M.D., MBA, FACP**

LeRoi Hicks, M.D., MPH, vice chair, Department of Medicine, said establishing a reputation for integrity and respect helps to position career-minded individuals for advancement.

"Finish what you start. Be good to people," he said. "Be fully confident in your own ability to succeed."

A professor who believed in him opened his eyes to the possibilities when he began exploring opportunities for fellowships.

"He said, 'why haven't you looked at a place like Harvard?'" recalled Dr. Hicks, who ultimately completed a fellowship in internal medicine and a master's degree in public health at Harvard Medical School.

The panel discussion was open to all Christiana Care employees. It was moderated by Dana Beckton, director, Diversity and Inclusion/Employee Development.

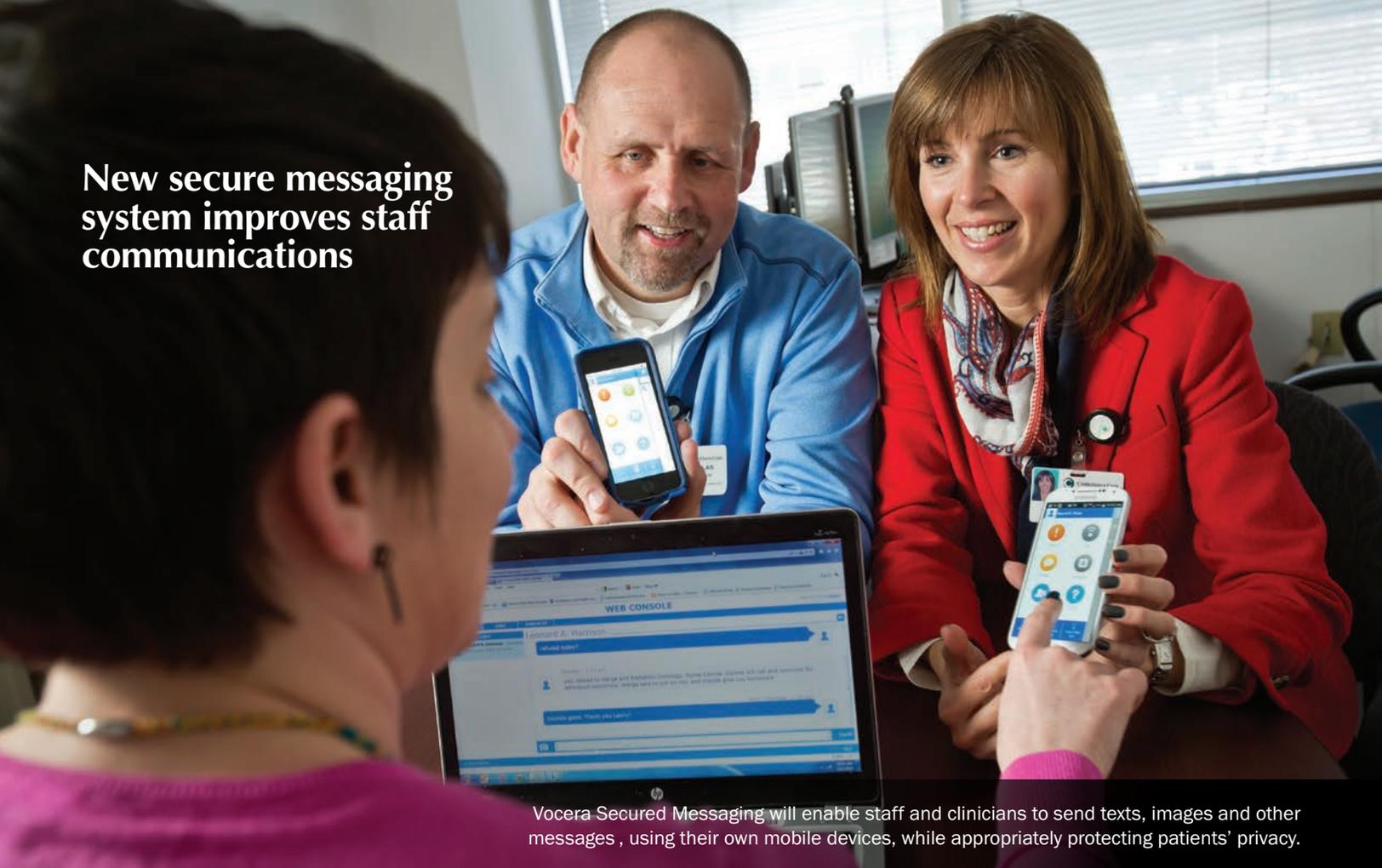
Melva Lane, BSN, MBA, RN-BC, nurse manager on 4W, said, "It is inspiring to see someone who looks like me talk about what it takes to be successful. I learned that I need to be more aggressive in finding a mentor."

Gail Blandford, RN, attended on her day off to learn from the panelists. She was inspired to establish a three-year plan. "I need to get a good idea of what my goals are," she said.

The panel discussion also resonated with Christiana Care employees listening remotely at Wilmington Hospital, who sent comments via smartphones and tablets through the Train-by-Cell program.

"The level of pride that I feel right now sitting in this auditorium among all of my colleagues is absolutely indescribable," said one audience member via Train-by-Cell. "Thank you to each of you for your example, your inspiration and sharing your stories. My prayer is that we will all use this experience today as a catalyst to be an example for others." ●

New secure messaging system improves staff communications



Vocera Secured Messaging will enable staff and clinicians to send texts, images and other messages, using their own mobile devices, while appropriately protecting patients' privacy.

Early adopters in Christiana Care's Communications Improvement Project report that a new secure messaging system is fast, efficient and easy to use.

The Vocera Secured Messaging system allows users to send, receive and share texts and images that are compliant with HIPAA regulations. Users can receive and send text messages and alerts via smartphones or a web-based console, eliminating the uncertainty of paging, said Lonie Sculley, project manager, IT.

"A big improvement is two-way messaging, versus one-way paging," she said. "There's also a mechanism so users can see if the message was sent, delivered, opened and responded to."

In a pilot program, 22 members of the Visiting Nurse Association tested the system, a mix of clinicians in the field using smartphones and schedulers on PCs in the office.

"A lot of time we are playing phone tag between our schedulers and our clinicians in the field," said Jennifer Rittreiser, VNA director. "Secure messaging is much faster and also gets answers to our patients faster."

The system also allows schedulers to transmit confirmed schedules or send out a group message asking if there is a nurse free to take another case. The latest telemonitoring results can be relayed to nurses en route to patients' homes.

"Before, we couldn't do that because we couldn't use a patient's name in a text," Rittreiser said.

Already, the system is showing results, with 58 percent of chats receiving a response in two minutes or less.

"Secure messaging means fewer phone calls to our schedulers, which means fewer calls are going to voicemail," she said. "That saves the time of listening to the voicemail and calling someone back."

The ability to securely communicate information about patients is a priority for pulmonologists and intensivists who are called in for consultations, said Natalie Reinbold, the group's business operations coordinator.

"Physicians can securely communicate, doctor to doctor," she said. "There's also a high-alert notification for priority messages."

In addition to text, images can be sent securely and efficiently.

"If a patient has a skin condition, the hospitalist can send a picture to a dermatologist who may be outside the hospital," she said.

Anesthesiologists and certified registered nurse anesthetists (CRNA) are among the clinicians who will benefit from technology that eliminates the delays sometimes associated with pages.

"We can text a number of people if we need help in a hurry," said Elias T. Chua, M.D., Department of Anesthesiology. "That will be very useful in emergency scenarios."

Secured messaging also provides an additional layer of alert in addition to overhead pages, which are not always heard clearly.

"An anesthesiologist may be covering as many as three rooms at a time," he said. "This helps us to be more efficient in caring for patients, and also adds to patient safety."

As early adopters, doctors and nurses are providing feedback. Suggestions include tailoring lists to include people in departments rather than everyone with a Vocera account and creating templates for routine messages.

"Our goal is to improve how groups communicate and not simply implement a new tool," said Karen Gifford, director of Information Technology. "The implementation team will assess current process needs and implement the appropriate features and tools to provide the best communication experience."

The goal is to enhance communication, which ultimately enhances care. For example, bedside nurses can leverage their existing hands-free Vocera badges.

"Messages sent via the mobile app from a clinician transfers it into a voice message that the nurse at the bedside can listen to," Sculley said.

Gifford notes that the health system also is working with other vendors such as Apple and Cerner to meet the current and future needs of communication in the most cost-effective manner.

"The future is mobile," she said. "Don't be surprised in the coming years when you see clinicians using an iPhone to access clinical information, administer meds, monitor alarms and communicate."

The Communications Improvement Project team is focusing on two phases. In Phase 1, targeted for June, the current web paging system will be replaced with the new Vocera Web Console. In Phase 2, the mobile app will be upgraded based on input from early adopters. The initial department rollout will focus on those three departments in the fourth quarter of 2015, with Vocera experts on-site to assist. ●



More than 200 attend the annual Heart Month community lecture

A panel of Christiana Care heart experts discussed the latest on heart health, heart rhythm problems, pacemakers, and blood thinners, and answered questions from the audience of more than 200 attending the annual Center for Heart & Vascular Health Heart Month community lecture, Feb. 18.

Pictured above: Brian Sarter, M.D., associate chief for operations, Section of Cardiology and medical director, Heart & Vascular Interventional Services; Leigh Sibert, APN, ACNS-BC, lead clinical nurse specialist, Christiana Care Cardiology Consultants; and Henry Weiner, M.D., associate chief for Quality, Section of Cardiology and medical director, Christiana Care Cardiology Consultants. ●

Hot topics include anti-coagulants, sodium at 26th annual Update in Cardiology

At the 26th Annual Update in Cardiology symposium, March 7 at the John H. Ammon Medical Education Center, more than 200 doctors and other health professionals examined long-held practices and new ideas in the management of diseases of the heart and circulatory system.

Topics included recent findings on the use of aspirin in preventing strokes and heart attacks, risk assessment for patients with atrial fibrillation, strategies for helping patients to quit smoking and evidence-based practices regarding interrupting anticoagulant medications in patients who are undergoing surgery or dental work.

Andrew J. Doorey, M.D., clinical cardiologist with Christiana Care Cardiology Consultants and program director of the event, compared the risk of stopping anticoagulation medications in patients who require a colonoscopy after colon cancer to the risk of continuing to take the drug.

Studies show that the risk of stroke after interrupting anticoagulants is far greater than the risk of bleeding. Additionally, 45 percent of patients who suffered strokes after interrupting their meds died or had severe disability, while none of the patients who bled died.

"With the bleed, you get a transfusion, are in the hospital for three days and go home," Dr. Doorey said. "I would take that over a stroke any day."

That same strategy applies to interrupting anticoagulants for dental procedures such as tooth extractions, said Michael



William Weintraub, M.D.

Wahl, D.D.S. Dr. Wahl said managing bleeding typically is not problematic in dentistry.

"Pressure, biting down on gauze, usually that's all you need," he said.

William Weintraub, M.D., MACC, FAHA, FESC, John H. Ammon Chair of Cardiology and director of the Value Institute's Center for Outcomes Research, spoke about the challenge of analyzing big data and the need for randomized trials, which "trump observational studies," he said. Patients benefit every day from randomized trials that have had extensive clinical impact, including lipid lowering therapy and beta blockers to treat heart failure.

Andrew Doorey, M.D., and Roger Kerzner, M.D.



In other highlights:

- Sandra Weiss, M.D., an interventional cardiologist with Christiana Care Cardiology Consultants, discussed insights from the COURAGE and FAME2 trials, concluding stress testing and percutaneous intervention, in which a stent is used to open a narrowed artery, are not just for unstable coronary artery disease patients.
- Arthur Colbourn, M.D., of Cardiology Consultants, advocated for the use of ambulatory blood pressure devices that measure blood pressure throughout the day and night in order to get a more accurate picture of the patient's risks. "Nighttime hypertension is an indicator of the risk of heart attack and stroke," Dr. Colbourn said.
- Strategies to help patients take their medications as directed was the topic for Doyle Cummings, Pharm.D, a professor at East Carolina University. He said cardiology patients who stop taking meds are four times more likely to have a bad outcome compared to adherent patients. He advocated partnering with patients to help them understand complex regimens, in addition to automatic phone calls to patients who don't pick up their prescriptions.
- Assessing patient fragility allows clinicians to individualize plans of care, including community resources and support systems, said Beth Well, MSN, ANP-BC, lead nurse practitioner at Christiana Care Cardiology Consultants. Frailty is based on slow walking speed, weakness, inactivity, exhaustion and shrinking.
- In evaluating patients with atrial fibrillation, age and diabetes typically are higher-intensity risk factors than gender, said Henry L. Weiner, M.D. While gender alone should not determine treatment, he recommended anticoagulants for patients with a CHADS score of two or more.

- Should all patients take aspirin? That rule of thumb is no longer definitive based on the evidence, said Roger Kerzner, M.D., medical director, Electrophysiology Lab at Christiana Care. "I no longer add aspirin for primary prevention," he said.

Michael Banbury, M.D., W. Samuel Carpenter Distinguished Chair of Cardiovascular Surgery, encouraged physicians to ponder patients' long-term quality of life in developing plans of care.

For example, transcatheter aortic valve replacement, a noninvasive procedure, increases the risk of stroke. But patients who are too frail for surgery benefit because they can go home from the hospital the next day instead of to a rehabilitation center, where their odds for recovery are statistically less favorable.

"The question we need to ask is: When will they be happy they had the surgery?" Dr. Banbury said.

On the topic of salt, recent studies suggest the impact of sodium intake on hypertension and heart disease are overstated, said Andrew Mente, Ph.D., an associate professor of clinical epidemiology at McMaster University in Ontario.

"If you consume an all-round healthy diet, salt reduction becomes less important," he said.

In follow-up debate, Dr. Weintraub said he believes controlling sodium intake is an important element in managing care for heart patients. He noted that the studies do not account for reverse causality, in which the cause is confused with the effect.

"People who don't feel well eat less," he said. ●

Arthur Colbourn, M.D.



Sandra Weiss, M.D.



Andrew Mente, Ph.D.





Service Assistant Prudence Ramey chats with a hospital patient at Wilmington Hospital while cleaning and sanitizing her room. Through a Lean Six Sigma project, service assistants are learning to more effectively engage with patients, using a communication tool called AIDET, and ultimately improve the patient experience.

Christiana Care Lean Six Sigma training continues to create value

Four years into its existence, Christiana Care Health System's Lean Six Sigma program is rapidly expanding organizational capacity to deliver value within the health system. By training employees in departments throughout Christiana Care as quality-improvement experts, the program creates employees who can recognize opportunities, identify root causes of problems, develop quality-improvement interventions and deliver meaningful, sustained improvements in health care from the inside out.

"Lean Six Sigma training is showing concrete results in the elimination of waste and errors, greater patient satisfaction, and improvements in efficiency, effectiveness and affordability of care," said Vernon L. Alders, MHCDS, MBA, MSW, corporate director, Organizational Excellence, and director of the Value Institute's Center for Organizational Excellence. "The training is also generating a remarkable return on investment. Projects in our first two Green Belt classes have resulted in cost savings of more than \$3 million."

The program is offered through the Value Institute's Center for Organizational Excellence, sponsored in partnership with the internationally recognized Juran Institute quality-management company.

On Feb. 16, Christiana Care graduated its first class of Lean Six Sigma Yellow Belts, a group of about 100 employees from 11

departments throughout Christiana Care who participated in training that introduced them to Lean Six Sigma quality-improvement principles. About 30 members of the inaugural Yellow Belt class took an additional exam to earn certification as Rapid Process Improvement leaders.

Under the expert guidance of Senior Organizational Excellence Consultants E.J. Johnson, Ph.D. ChE, MSChE, MBA, LSSMBB, and Derek Vandersteur, MSM, BSIE, MBB, this year's program was enhanced significantly to add rigor to the team's performance-improvement projects.

Also this fiscal year, the program expanded to include its first Black Belt class — a group of eight Christiana Care employees working toward advanced Lean Six Sigma certification — and offered Green Belt and Yellow Belt training to candidates outside of Christiana Care for the first time to help expand organizational capacity among partner organizations.

Along with the new Yellow Belt and Black Belt programs, Christiana Care is in its third year of offering intensive Green Belt training. About 60 employees have completed the months-long training, and another 30 are in a current class. The training process for all belt levels includes each candidate identifying and completing a quality-improvement project within his or her individual area of expertise. ●

Study shows excess salt intake harms more than just blood pressure

Although it is widely known that excess salt can cause unhealthy blood pressure levels, researchers from Christiana Care Health System and the University of Delaware concluded that excess salt intake also wreaks havoc on many other organs.

Consuming too much salt can adversely impact the heart, kidneys, blood vessels and brain, according to a research review paper published in the March 2015 issue of the *Journal of the American College of Cardiology* by William Weintraub, M.D., MACC, FAHA, FESC, John H. Ammon Chair of Cardiology at Christiana Care and founding director of the Value Institute's Center for Outcomes Research, and William Farquhar, Ph.D., chair and professor of the Cardiovascular Research Laboratory at the University of Delaware. The study was covered by numerous national and international media outlets.

"Our goal is to arm patients and their families with the information they need to make healthy decisions about their diets so they can live healthy lives," Dr. Weintraub said. "Other research has established the unhealthy impact of increased salt intake on blood pressure, but this review goes beyond those findings to shine a light on the unhealthy impact excess salt intake causes on several other organs."

Specifically, the review of more than 100 studies by Weintraub and Farquhar found that excess salt intake can cause serious health problems, even in the absence of blood-pressure complications.

In the heart, increased salt intake can cause an enlargement of the walls of the main pumping chamber, forcing the chamber to work harder, and thereby increasing the risk for cardiovascular problems.

In the kidney, increased salt intake can cause an increase in protein excretion, as well as a hindrance of the rate of waste filtration from the blood.

In the blood vessels, increased salt intake can cause a disruption of the ability of their inner lining to function properly.

In the brain, increased salt intake can cause the unnecessary activation of the fight-or-flight response, which can result in a cascade of health problems.

According to a 2012 National Health and Nutrition Examination Survey, 97 percent of U.S. adults consumed more sodium than recommended by the federal government's Dietary Guidelines for Americans.

Weintraub and Farquhar conclude that a coordinated, population-wide effort should be launched to reduce the intake of sodium that is inclusive of health advocacy groups, food processors, restaurants and public policy makers.

Christiana Care's Center for Outcomes Research features researchers with established expertise in clinical, population health and cost-effectiveness research. The center focuses on the impact of alternative approaches to prevention, diagnosis and treatment of disease.

The Center for Outcomes Research is one of four centers within Christiana Care's Value Institute, whose goal is to develop, deliver and evaluate innovative practice and policy solutions that improve the experience, efficiency and effectiveness of health care for patients and providers alike.

The study was supported through the Delaware Clinical and Translational Research Program, also known as CTR-ACCEL, with a five-year, \$20 million grant from the National Institutes of Health to support clinical and translational research, given to the University of Delaware, Christiana Care, Nemours and the Medical University of South Carolina. Dr. Weintraub is the leading investigator for CTR-ACCEL at Christiana Care.

Other authors in the review include Claudine Jurkowitz, M.D., MPH, senior physician scientist with Christiana Care's Value Institute, whose mission is to develop, deliver and evaluate innovative health care solutions that meet the Triple Aim of improving patient experience and population health while reducing health care costs. David G. Edwards, Ph.D., associate professor of the Vascular Physiology Laboratory at the University of Delaware, also is an author in the review. ●



ACCORDING TO A 2012 NATIONAL HEALTH AND NUTRITION EXAMINATION SURVEY:

97%
of adults in the U.S. consumed more sodium than recommended by the federal government's Dietary Guidelines for Americans



The CenteringPregnancy program offers expecting mothers information and support from health care providers and women at the same stage of pregnancy.

CenteringPregnancy gives moms-to-be a fun way to receive prenatal care

“We’re committed to guiding women through pregnancy, labor, birth and beyond.”

ELIZABETH ZADZIELSKI, M.D., MBA, FACOG,
MEDICAL DIRECTOR OF WOMEN’S HEALTH
AMBULATORY SERVICES, DIVISION OF EDUCATION

For women who are expecting — especially first-time mothers — pregnancy can be a stressful time, filled with questions and anxiety about the unknown. An innovative approach called CenteringPregnancy — a model of prenatal care based on a group approach to health care assessment, education and support — has proven highly effective in addressing these concerns and has significantly improved health outcomes for mothers and babies. Christiana Care is the only birthing facility in Delaware to offer a CenteringPregnancy program.

“We’re committed to guiding women through pregnancy, labor, birth and beyond,” said Elizabeth Zadzielski, M.D., MBA, FACOG, medical director of Women’s Health Ambulatory Services, Division of Education. “CenteringPregnancy is an evidence-

based approach that provides expecting moms with direct access to the education and support that they need.”

The program combines prenatal care visits with time to learn with other mothers-to-be.

Research demonstrates that the CenteringPregnancy model increases patient satisfaction, promotes healthy behaviors during pregnancy, decreases rates of preterm and low-birth-weight infants, and increases rates of breastfeeding and immunizations.

Additional benefits include no waiting time for appointments, the opportunity for women to engage with and receive support from their peers, and more time for questions, information and concerns than office visits might allow.

The model was first introduced at Christiana Care's Wilmington Hospital in 2009, where participation in the program remains strong. After a hiatus from Christiana Hospital, the program returned in October and has quickly gained momentum. Between the two hospitals, there are typically six CenteringPregnancy groups in progress at any given time.

Each group includes eight to 12 women who are at the same stage of pregnancy. They progress together through 10 sessions over the duration of their pregnancies. There is no additional charge for this program, which is open to women receiving obstetrical care in Wilmington Women's Health Office or Christiana Hospital's Suite 1900 practice.

"The CenteringPregnancy approach gives women much more time, information and support than they would receive in a traditional obstetric visit," said Elizabeth S. Sushereba, MSN, CNM, a certified nurse midwife at Christiana Care who helped launch the Centering program in 2009 and currently leads several groups. "Many women are initially unprepared for or uneducated about pregnancy. Centering provides the information they need, delivered in a supportive group environment, and makes them an active part of their prenatal care. It empowers women to guide their own birth experience."

Upon arrival to each session, women have an individual check-up with their clinician before coming together as a group. The sessions, led by a nurse practitioner, certified nurse midwife or doctor, feature guest speakers such as

dietitians, lactation consultants, physical therapists and social workers. Topics include healthy food choices, labor, breastfeeding and postpartum depression.

Shannon Pearson of Smyrna, now a mother of three, participated in Christiana Care's CenteringPregnancy program twice. "I absolutely loved it," said Pearson. "I learned so much. For example, I didn't want to get an epidural because I was scared. Once I understood how it works, it calmed my nerves. We learned about C-sections — just in case. We learned about breastfeeding and even how to make rice socks that we could heat up in the microwave to sooth our aching backs. Sometimes there were questions I didn't think of that other people had. And I met so many new friends. It was a very supportive experience." ●

"Centering provides the information they need, delivered in a supportive group environment, and makes them an active part of their prenatal care. **It empowers women to guide their own birth experience.**"

ELIZABETH S. SUSHEREBBA, MSN, CNM

Expecting mother Malisa Azzarello and her mother listen as Women's Health Nurse practitioner Deanna Benner, MSN, WHNP-BC, checks the baby's heartbeat during a CenteringPregnancy session.



For more information about the CenteringPregnancy program at Christiana Hospital, call 302-733-6510. For the program at Wilmington Hospital, call 302-320-4414.

NICU team earns honors for making care personal for every family



Volunteer NICU Ambassador Donna Suro shares a moment with Jamie Chamberlain and her daughter Kendall at Christiana Care's Neonatal Intensive Care Unit.

Christiana Hospital is the only high-risk delivering hospital in Delaware offering Level III neonatal intensive care.

A value-improvement team at Christiana Care's Neonatal Intensive Care Unit (NICU) recently earned three honors for innovative, multidisciplinary initiatives focused on partnering with families and centering expert, respectful care on babies and their loved ones.

The NICU team earned the 2014 Success Story Award from Press Ganey, a nationally known health care performance-improvement firm; the Christiana Care Unit-Based Value Improvement Team Award; and an honorable mention at Christiana Care's Focus on Excellence Awards in the category "Think of Yourself as a Patient."

"We strive to provide our patients with high-quality medical care, and we are committed to creating a positive, memorable experience for them and their families," said Shawn R. Smith, MBA, vice president, Patient Experience.

"These awards are a validation of that commitment and of our promise to serve our neighbors as respectful, expert, caring partners in their health."

Value-improvement teams bring together interdisciplinary staff members who collaborate to improve the patient experience. The 40-member NICU team includes doctors, nurses, physical and respiratory therapists, pharmacists and patient educators, professionals from Pastoral Care, Environmental Services, and Facilities and Services, administrative staff, and patient and family advisers.

"The honors reflect a true team effort of everyone who interacts with patients and families on the NICU," said Carlos Duran, M.D., FAAP, NICU neonatologist and a leader of the value-improvement team.

The team's journey began three years ago, when the unit began interviewing families about their NICU experiences.

“Most said the staff was doing a good job. But some responses indicated a need for improvement,” Dr. Duran said. “We heard clearly, too, that parents wanted to hold their babies more.”

To learn more, the NICU developed a survey for staff and families. They studied best practices from the Institute for Patient- and Family-Centered Care, a nationally recognized advocacy group.

“It was exciting to see the compassion and sincerity in establishing clear communication across our teams so that families get a consistent picture of the care their babies are receiving,” said Amanda Sleeper, a volunteer who serves on both the NICU’s Family Centered Care Committee and the Patient and Family Advisory Council at Christiana Hospital.

The survey led to multiple initiatives designed to enhance the patient and family experience.

In the NICU Ambassador Program, volunteers escort families to the NICU and help them with non-medical concerns, such as showing them how to scrub before entering the unit.

The NICU staff makes sure that the care they deliver is personal. They call each baby by name. New informational whiteboards near each crib display the nurse’s name and the baby’s name, so families always know who is caring for their baby.

New brochures were designed, based on patient feedback, to make it easy for parents to absorb medical information while their newborn is in the NICU.

Parents are encouraged to hold their babies, and they are invited to participate in their babies’ care updates at the bedside.

“If they can’t make it, sometimes the doctor will call them on a cellphone and conference them in,” Sleeper said. “The whole idea is to center care around the baby and the family.”

Within five days of discharge, neonatologists call families at their homes to address any concerns they have.

“We know that families often feel overwhelmed after they take their babies home,” Dr. Duran said. “This provides parents with an opportunity to ask

questions and make certain they understand when their next appointments are.”

Sleeper, Smith and Dr. Duran presented their success story to a national audience and accepted their award on behalf of the entire team at the 2014 Press Ganey Client Conference in Orlando, Fla.

Christiana Hospital is the only high-risk delivering hospital in Delaware offering Level III neonatal intensive care. The NICU provides 24/7 onsite board-certified neonatologists and is fully equipped with the technology and personnel to provide the highest standards of acute care for the newest members of the families we serve. ●

Led by neonatologist Carlos Duran, M.D., FAAP, and Assistant Nurse Manager Bonnie Chavez, BSN, RNC, and built on partnerships across multiple departments, disciplines and roles throughout Christiana Care, the award-winning value-improvement team for the Neonatal Intensive Care Unit is ensuring every family is engaged as partners in care.



Christiana Care team participates in HIV/AIDS Awareness Day event for women and girls

Health professionals from Christiana Care participated in the 10th annual Saving Our Sisters, a one-day conference on March 7, National Women & Girls HIV/AIDS Awareness Day, sponsored by the Beautiful Gate Outreach Center. Speakers and participants at the event included: Elizabeth Sushereba, CNM; OB-GYN resident Victoria Greenberg, D.O.; Lisa Phillips, M.D.; Arlene Smalls, M.D.; Health Ambassadors Venus Jones and Shirley Ibrahimovic; and Bernadette Baker, RN, of the Cardiovascular Prevention Program.

“This day was so powerful,” said Patricia Lincoln, RN, BSN, ACRN, site director of the Christiana Care Delaware local performance site of the Pennsylvania Mid-Atlantic AIDS Education Training Center. Lincoln is on the planning committee for the annual event, which was attended by more than 250 teen and adult women this year. “Each year we see families attend — great grandmothers, grandmothers, mothers and daughters. Some have attended since the beginning and have remained healthy as a result.”

The event included age-appropriate workshops with discussions on the importance of a positive self-image, self-worth, empowerment, healthy relationships, HIV prevention and the importance of medical treatment for women and girls who are living with HIV.



Health Ambassadors Venus Jones and Shirley Ibrahimovic provide health information to attendees at the Saving Our Sisters event.

Janice Heinsen, FNP-BC, AAHIVS, a nurse practitioner with Christiana Care’s HIV Program, was honored with this year’s Queen Award, which recognizes women who have shown dedicated leadership and advocacy in the fight against HIV.

The Christiana Care HIV Program has partnered with Beautiful Gate Outreach Center since 2005 to integrate HIV medical care into Beautiful Gate’s faith-based HIV testing and outreach program. Currently, the clinical team from the HIV Program provides medical care at Beautiful Gate to more than 50 patients. ●



Pernessa Seele, DHL, immunologist, public health advocate and founder and CEO of the nonprofit organization The Balm In Gilead Inc., Lisa Phillips, M.D., and Renee Bauman, RN, founder of Beautiful Gate.



Blood Pressure Ambassadors Bernadette Baker, RN, of Christiana Care’s Cardiovascular Prevention Program, and Judith Moore, RN, conduct free blood pressure screenings.

Glen H. Tinkoff, M.D., FACS, honored with NSC Surgeons' Award for Service to Safety

Glen H. Tinkoff, M.D., FACS, Christiana Care associate vice-chair, surgery, for Emergency Surgical Services, received the National Safety Council 2014 Surgeons' Award for Service to Safety at the annual ACS Committee on Trauma Dinner in San Francisco.

The Surgeons' Award for Service to Safety is sponsored by the National Safety Council and nominated by the American Association for the Surgery of Trauma (AAST) and the American College of Surgeons (ACS) Committee on Trauma to recognize outstanding service to safety by surgeons or surgical organizations.

The award citation recognized Dr. Tinkoff's "commitment to the advancement of care of injured patients through leadership in the organization of a regional trauma care system and outstanding trauma research."

Dr. Tinkoff recently completed 18 years' tenure on the ACS Committee on Trauma. During that time, he served as Delaware state COT chair, mid-Atlantic region chief, member of the executive committee, and as chair of the trauma performance improvement and patient safety subcommittee. He also currently chairs the Trauma Prevention Coalition,



Glen Tinkoff M.D., associate vice-chair, surgery, for Emergency Surgical Services, (center), receives the National Safety Council 2014 Surgeon's Award for Service to Safety, presented by Ronald M. Stewart, M.D., FACS, COT Chair (left), and John Ulczycki, NSC vice-president.

which is sponsored by the AAST and represents the major professional trauma organizations through promoting collaborative efforts and developing effective strategies in injury and violence prevention. ●

Best practice review

FALL PREVENTION

Q. HOW CAN I HELP PATIENTS RECOGNIZE THEIR OWN FALL RISK?

- A. Staff can help patients to recognize their fall risk by educating patients and family on the patient's individualized fall risk factors by:
- Engaging patients and families in bedside shift report.
 - Linking the patient's fall risk with high-risk medications.
 - Utilizing the Falls Pathway on the GetWell Network.

Q. WHAT ARE SOME EFFECTIVE WAYS I CAN COMMUNICATE THE PATIENT'S RISK FOR FALLING TO OTHER MEMBERS OF THE HEALTH CARE TEAM?

- A. Staff can communicate a patient's risk for falls by utilizing fall-risk ID bracelets, fall-precautions signs,

whiteboards, the travel ticket and mobility signs, as well as communication during handoffs.

Q. HOW CAN I BETTER IDENTIFY THOSE PATIENTS AT HIGH RISK FOR INJURY WITH A FALL?

- A. Staff can identify patients at high risk for injury due to falls by utilizing the High Risk for Injury Related to Fall Assessment Tool, which incorporates age, bones and coagulation. This assessment is done upon admission and is reviewed by the patient's primary nurse on a daily basis with the Schmid Fall Risk Assessment Tool.

Q. WHAT INTERVENTIONS CAN I TAKE IF MY PATIENT IS CONSIDERED A HIGH RISK FOR FALLS OR A HIGH RISK FOR INJURY RELATED TO A FALL?

- A. Interventions for a patient at high risk for falls or injury related to a fall include:
- Toilet patient every two hours.
 - Stay with patient while toileting.
 - Use gait belt with ambulation and transfer.
 - Bed or chair exit alarm.
 - Request family to stay with patient. ●

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 If you have questions about this Best Practice Review, please contact the content experts: Lisa Arnold, BSN, RN, 733-6896; Denise L. Lyons, MSN, RN, AGCNS, 733-5338, Patricia Curtin, M.D., 733-6603, or the Safety Hotline, 7233 (SAFE) from within Christiana or Wilmington hospitals. From outside call 623-7233 (SAFE).



John Goodill, M.D., named director for Palliative Medicine Education and Outreach

John Goodill, M.D., FACP, FCCP, who founded the Pain and Palliative Care program at Christiana Care in 2004, has been appointed the director for Palliative Medicine Education and Outreach.

“This appointment will allow Dr. Goodill to expand upon

his already excellent work promoting palliative medicine throughout the Christiana Care Health System and in the community and to teach palliative care principles to residents, students and other caregivers,” said Virginia U. Collier, M.D., MACP, the Hugh R. Sharp Jr. Chair of the Department of Medicine at Christiana Care.

Working with Roshni Guerry, M.D., medical director of Palliative Medicine, Dr. Goodill will develop and implement strategies to enhance Christiana Care’s impact on palliative medicine in the community, a vital component of a successful population health strategy. He also will work with our External Affairs department to continue outreach to various community groups and government and non-government non-profit agencies and to promote patient-centered palliative care policies. He will continue to champion efforts to pass DMOST (Delaware Medical Orders for Scope of Treatment) legislation

in Delaware. Finally, he will continue to be clinically active as a member of the inpatient palliative medicine team.

Dr. Goodill earned his medical degree in 1982 from Hahnemann University, which is now part of Drexel University College of Medicine, Philadelphia. He completed his residency in internal medicine in 1985 at Christiana Care and a two-year fellowship in pulmonary medicine through Brown University at Rhode Island Hospital in Providence, R.I. He joined Christiana Care in 1987.

Dr. Goodill also works for Christiana Care as a clinical instructor in medicine and as a physician in the Adult Cystic Fibrosis Program. Additionally, he has worked in private practice as a pulmonary medicine specialist since 1987. He was a partner in Pulmonary Associates in Newark from 2000 until 2013. He is board-certified in internal medicine, palliative care and pulmonary disease. He is a fellow in the American College of Chest Physicians and American College of Physicians. He has been the chair of the Christiana Care Ethics Committee since 1995 and currently co-chairs the committee.

Dr. Goodill is a clinical instructor at Sidney Kimmel College at Thomas Jefferson University, Philadelphia.

His special interests include general internal medicine and teaching, public health, medical ethics and obstructive airways diseases such as cystic fibrosis and asthma. ●



Roshni Guerry, M.D., appointed medical director of Palliative Medicine

Roshni Guerry, M.D., has been appointed medical director of Palliative Medicine.

Dr. Guerry will be the physician leader for clinical, operational and strategic aspects of Christiana Care’s evolving palliative medicine program.

“Palliative care is about the conversation,” she said. “It is about listening to patients on what matters most to them so we can match the medical treatment that aligns with their goals. The only way to know is to ask. Our team is working to find innovative ways to promote these conversations, so they happen more, better and earlier.”

Dr. Guerry joined Christiana Care in 2011 after completing a fellowship in hospice and palliative medicine with Timothy Quill, M.D., at the University of Rochester. She graduated from the Internal Medicine-Pediatrics Residency Program at the University of Rochester School of Medicine.

Dr. Guerry has led significant educational efforts in palliative medicine, including partnering with A.I. DuPont Hospital in the development of an ACGME fellowship in hospice and palliative medicine, contributing to resident and provider education, and as a champion for initiating The Christiana Care Way Rounds.

Dr. Guerry and other members of the palliative medicine team were recipients of a 2014 Focus on Excellence Award for their collaboration with the Christiana Care Heart Failure Team on a project that demonstrates the effectiveness of integrated care team models. ●



John Flaherty, Pharm.D, to direct Outpatient and Population Health Pharmacy Services

John Flaherty, Pharm.D, has been appointed director of Christiana Care Outpatient and Population Health Pharmacy Services.

Flaherty comes to Christiana Care from Delaware Supermarkets, where he led four community pharmacies

located in Shoprite Supermarkets. In addition to managing daily operations, he also developed their companywide wellness initiative, which focused on both employee wellness and community outreach. The program's design included embedding a dietician within the pharmacies and focusing on

Medicare STARS criteria to improve outcomes of targeted patient groups.

As director of Outpatient and Population Health Pharmacy Services, Flaherty will manage the operations of Christiana Care's two retail pharmacies and the employee mail-order pharmacy. Additionally, he will provide leadership to Pharmacy Services' population health activities such as the delivery of clinical pharmacy services in our outpatient practices and the gathering of medication histories by certified pharmacy technicians (CPhT) during patient admission to the acute care setting.

Flaherty received a bachelor's degree in pharmacy at Long Island University in 1996 and a Pharm.D degree from Shenandoah University in 2002. ●

Your fitness journey starts with a walk

Even if you have never worked out, there is one exercise just about everyone can do.

Walking doesn't require expensive equipment. You don't have to practice for hours to achieve a level of expertise.

You just put one foot in front of the other.

Daily physical exercise — including a 30-minute walk — lowers blood pressure and boosts levels of HDL (so-called "good cholesterol"). Regular walking helps to boost energy and improve sleep. Regular walking also helps to prevent obesity.

Walking 150 minutes a week can reduce your risk of developing Type 2 diabetes by 58 percent, according to the Diabetes Prevention Program. Studies indicate that walking helps to ease depression and reduces the risk of breast and colon cancers.

While specially designed walking shoes and other equipment aren't required, you should certainly invest in comfortable footwear that provides good support

while you are walking. A pedometer — a device that measures how many steps you take — can be a great motivational tool, pushing you toward a goal.

Most people log at least 6,000 steps a day even without exercising. Because they are aware of how many steps they are taking, pedometer users tend to take at least 2,000 steps a day more than individuals who don't keep track of their steps.

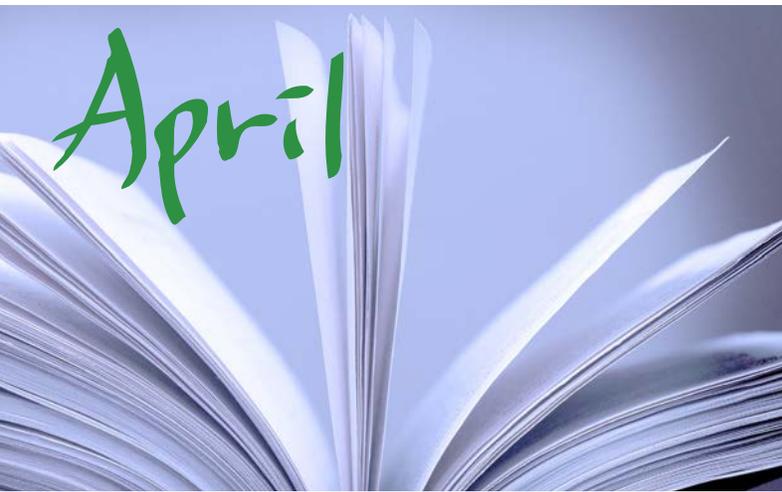
In a group study of women, half were told to measure their steps with a pedometer and the other half were simply instructed to walk more. The group with the pedometers walked 30 percent farther than the other group.

Having a buddy to walk with is another effective motivator. When we know a friend is waiting to walk with us, we are much less likely to miss our daily constitutional.

Here are a few other tips to help you get off on the right foot:

- Walk safely. Carry water and a cellphone. Wear sunscreen and a hat during the day and reflective clothing at night.
- Don't overdo it. Walk at a rate that elevates your heart rate. You should not be so breathless that you are unable to walk and talk at the same time.
- Mind your posture. The American Academy of Orthopaedic Surgeons recommends walking this way: Keep your head up, back straight and abdomen flat. Point your toes straight ahead and take long strides. Swing your arms.

Visit the Christiana Care employee wellness website to log your steps, learn about group walks, view maps to the Christiana Care walking trails and download exercise plans that will keep you moving this spring. ●

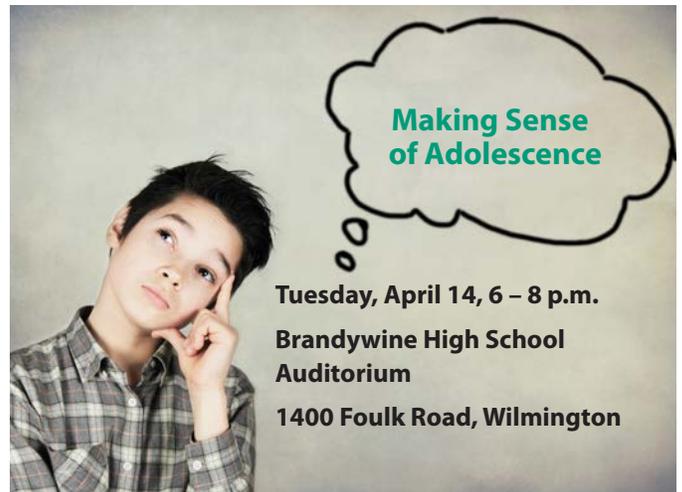


Medical Libraries Book Fair

Friday, April 10, 10 a.m. – 4 p.m.

West End Café, Christiana Hospital cafeteria

Hosted by the Christiana Care Medical Libraries in collaboration with Rittenhouse Book Distributors, the book fair offers medical texts and clinical books as well as consumer health books for sale at a 10 percent discount plus free shipping. A limited number of best-selling clinical texts will be available on-site, and online ordering will be done for any books not available at the fair. Check or credit card will be accepted. There will be an opportunity to win a Kindle Fire.



Making Sense of Adolescence

Tuesday, April 14, 6 – 8 p.m.

Brandywine High School Auditorium

1400 Foulk Road, Wilmington

Ever wonder why teens do what they do? Experts Mary M. Stephens, M.D., MPH, FAAFP, of Christiana Care's Department of Family & Community Medicine, and Judith Herrman, RN, ANEF, FAAN, University of Delaware School of Nursing, will talk about teen health issues and how teens think. For more information or to register, call 302-320-6584 or visit <http://www.de-ctr.org/community/seminar>.

National Health Care Decisions Day Forum

Thursday, April 16, 4-6 p.m.

John H. Ammon Medical Education Center or Wilmington Hospital Gateway Conference Center

Learn about the importance of advance care planning and documenting your wishes. View the Emmy nominated film "Consider the Conversation 2: Stories about Care, Relief and Comfort" with interactive Q&A. Register at <http://www.christianacare.org/healthcaredecisions>.



Neurovascular Symposium

Friday, April 17, 8 a.m. – 3:30 p.m.

John H. Ammon Medical Education Center



Christiana Care registration (Medical-Dental Staff and employees): \$55 in advance or \$75 on day of the event, if seating permits; non-Christiana Care registration: \$75 in advance or \$95 on day of the event, if seating permits; full-time students: \$20. No charge for Christiana Care residents and fellows to attend. Registration is required. Register at <http://cchs.cloud-cme.com/Neurovascular2015>.

Publishing

Jaya Bathina, MBBS, Sandra Weiss, M.D., William Weintraub, M.D., FACC. “Response to: Speculations on the pathophysiology of Takotsubo syndrome.” *Expert Review of Cardiovascular Therapy*. March 2015.

Edward F. Ewen, M.D., FACP, Paul Kolm, Ph.D., Marci Drees, M.D., MS, FACP, DTMH, et al. “Antibiotic prescribing by telephone in primary care.” *Pharmacoepidemiology and Drug Safety*. February 2015.

Erin Habecker, M.D. “Pregnancy Loss May Affect Mood in Subsequent Pregnancies.” *Massachusetts General Hospital Center For Women’s Mental Health*. March 4, 2015. Blog: <http://womensmentalhealth.org/posts/pregnancy-loss-may-affect-mood-in-subsequent-pregnancies/>.

Caitlin A. Halbert, D.O., MS, Mark D. Cipolle, M.D., Ph.D., Gerard J. Fulda, M.D., Glen H. Tinkoff, M.D., Joan M. Pirrung, RN, MSN, and Michael Kalina, D.O. “Admission to an Observational Unit Improves Length of Stay for Patients with Mild Traumatic Brain Injuries.” *The American Surgeon*. February 2015.

Barret Michalec, Ph.D., Natalie Reinhold, BA, Robert Dressler, M.D., MBA, Linda Laskowski-Jones, MS, RN, ACNS-BC, CEN, Daniel Elliott, M.D., MSCE, et al. “Barriers and facilitators to interprofessional-interdepartmental interventions: Unearthing departmental culture.” *American Journal of Medical Quality*. March 2015.

Edmondo Robinson, M.D., MBA et al. “TRANSFORM-ing patient safety culture: A universal imperative.” *Journal of General Internal Medicine*. April 2015.

Jamie M. Rosini, Pharm.D. and Pooja Dogra, Pharm.D. “Pharmacology for insomnia: Consider the options.” *Nursing* 2015. March 2015.

Anthony Sciscione, D.O., et al. “Society for Maternal-Fetal Medicine Special Report: The Maternal-Fetal Medicine Subspecialists’ Role Within a Health Care System.” *American Journal of Obstetrics and Gynecology*. December.

Presentations

At the Society of Hospital Medicine Annual Conference, National Harbor, MD in March-April 2015:

• **Vijaya Surekha Bhamidipati, M.D., Daniel J. Elliott, M.D., MSCE, FACP, Edmondo J. Robinson, M.D., MBA, FACP, Seema S. Sonnad, Ph.D., Janine M. Jordan, M.D.** “Interdisciplinary Admissions and Rounding to Improve Patient Outcomes.”

• **Vijaya Surekha Bhamidipati, M.D., Edmondo J. Robinson, M.D., MBA, FACP, Seema S. Sonnad, Ph.D., Daniel J. Elliott, M.D., MSCE, FACP.** “Structure and Outcomes of Inter-disciplinary Rounds in Hospitalized Medicine Patients: A Systematic Review.”

Vernon L. Alders, MHCDS, MBA, MSW, and **June Estock, MSN, RN, CPHQ, LBB,** “Organizational Excellence at Christiana Care.” *American Production and Inventory Control Society (APICS) Brandywine Valley Chapter professional development meeting*. March 2015. Newark, Del.

At the DE-CTR ACCEL 2nd Annual Meeting, February 2015, Charleston, S.C.:

• **Daniel J. Elliott, M.D., MSCE, FACP, Carla Russo, Paul Kolm, Ph.D., and William S. Weintraub, M.D., MACC, FAHA, FESC.** “Population Health: Let’s Start By Building a Bigger Bridges.”

• **Claudine Jurkovitz, M.D., MPH, James R. Bowen, BA, J. Thomas Laughery, BS, Richard Caplan, Ph.D., Sarahfaye Heckler, BA, Edward Ewen, M.D., FACP,** et al. “Linking Data for Kidney Care.”

• **Michael T. Vest, D.O., Paul Kolm, Ph.D., James R. Bowen, BA, Patty McGraw, RN, MS, CCRC, James Halbert, DPT, Claudine Jurkovitz, M.D., MPH,** et al. “Energy Balance & Outcomes of Obese, Mechanically Ventilated Patients in ICU.”

Terry Horton, M.D., FACP, Claudine Jurkovitz, M.D., MPH, Bailey Ingraham-Lopresto, MS, Elizabeth Ivy, et al. “Hospital-based Peer Counseling Reduces 30 Day Readmission of Alcohol Abusing Medical Inpatients.” April 2015. 46th American Society of Addiction Medicine Conference, Austin, Texas.

Stephen A. Pearlman, M.D., MSHQS, “Coding for the Neonatologist.” *California Association of Neonatologists*. February 2015. San Diego.

Adam Raben, M.D. “Long Term Biochemical Control and Toxicity for Favorable and Intermediate Risk Patients Using Real-Time Intra-Operative Inverse Optimization (io-psi) Prostate Brachytherapy

Alone.” *American Brachytherapy Society Annual Meeting*. April 2015. Orlando.

Alan Schwartz, Psy.D. “A Twist of Lyme? Disentangling Severe Medical Disorders and Conversion in Psychological Assessment.” *Annual Meeting of the Society for Personality Assessment*. March 2015. Brooklyn, N.Y.

Anthony Sciscione, D.O., et al. “Racial/Ethnic Standards for Fetal Growth - the NICHD Fetal Growth Studies.” *35th Annual Society for Maternal-Fetal Medicine meeting*. February 2015. San Diego.

Maureen A. Seckel, APN, ACNS-BC, CCNS, CCRN, FCCM. “Pharmacology Update for Pulmonary Arterial Hypertension.” *National Association of Clinical Nurse Specialist’s Annual Conference*. March 2015. San Diego.

Robert Witt, M.D., and Swati Pradhan-Bhatt, Ph.D. “Building Salivary Cell Mini-Modules: A First Step Toward Reconstruction of a Human Salivary Gland.” February 2015. *Gordon Research Conference, Galveston, Texas*.

Susan Smola, JD, MBA. “Medical Home Without Walls: Patient Engagement Informing a Random Clinical Trial.” February 2015. *DE-CTR ACCEL 2nd Annual Conference, Charleston, SC*.

Appointments

The Professional Advancement Council announced the following promotions to RN III: **Judith Napieralski**, Christiana ED, **Erin Day-Lewis**, CNOR, **Bridget Ryan**, MICU, **Beth Miller**, Christiana ED, **Carrie E. Stammer**, 6A, and **Angela Mercer**, Wilmington OR.

Awards

Ellen M. Justice, MLIS, AHIP, Community Health Librarian & Manager with the Medical Libraries Department, is the 2015 Randy Brenner Memorial Consumer Health Award winner. The Philadelphia Regional Chapter of the Medical Library Association gives this award to an individual (or group of individuals) in recognition of outstanding contributions to consumer health information services and patient education.

Andrea Bonner, BSN, RN III, PCCN, received the DAISY Award for Extraordinary Nurses in February. ●

FORMULARY UPDATE—FEBRUARY 2015

FORMULARY ADDITIONS

Medication – Generic/Brand Name	Strength/Size	Use/Indication	Comment
Aflibercept / Eylea	2 mg/0.05 mL 0.05 mL vial	<ul style="list-style-type: none"> • Treatment of neovascular macular degeneration • Treatment of macular edema associated with retinal vein occlusion or diabetes mellitus 	Will be administered to ophthalmology clinic patients who no longer respond to treatment with bevacizumab.
Ibrutinib / Imbruvica	140 mg capsule	<ul style="list-style-type: none"> • Treatment of mantle cell lymphoma • Treatment of chronic lymphocytic leukemia 	Prescribers other than hematologists and medical oncologists must obtain agreement of hematologist or oncologist before ordering.

FORMULARY DELETIONS

Ampicillin capsules	Removed to prevent look-alike, sound-alike errors with amoxicillin. See interchange below.
d-Xylose	No longer a need for d-xylose to be on the Christiana Care Formulary
Danazol	Removed because of lack of use
Didanosine	No longer a need for didanosine to be on the Christiana Care Formulary
Etidronate	Removed because of lack of use
Hexaminolevulinate	No longer a need for hexaminolevulinate to be on the Christiana Care Formulary
Isosorbide dinitrate sublingual tablets	No longer manufactured. Oral tablets remain available
Pilocarpine ophthalmic solutions	3%, 6%, 8% and 10% solutions no longer manufactured. 1%, 2% and 4% solutions remain available
Saquinavir	No longer a need for saquinavir to be on the Christiana Care Formulary

THERAPEUTIC INTERCHANGE

Ampicillin capsules	Ampicillin capsule → Amoxicillin capsule (dose & frequency dependent on indication & kidney function)
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REVISED MEDICATION POLICY

Ketamine restriction	The restriction on ketamine administration has been revised to permit ketamine to be administered to non-intubated patients for the treatment of refractory pain or palliation of symptoms. Ketamine can be initiated and continued for these indications in the ED's, ICU's, CTSU-2B, C6B, OR's, PACU's or SPU's, when the prescribing physician is immediately available by phone during initiation of treatment and for each ordered bolus dose or upward titration of the continuous infusion. Nurses may discontinue ketamine at any time if there is concern for patient safety or excessive sedation; and when they do, they should notify the prescribing physician of the reason for discontinuation.
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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.

Goodbye mortars and pestles, hello automation and HD cameras

By Sarah Verbyla, Pharm.D

Outside of the pharmacy, very few people know what happens between the time a provider signs a medication order and that medication being delivered to the patient's nursing unit. Deep down in the recesses of the lower level at Christiana Hospital, two cutting-edge technologies are being incorporated to increase efficiency and patient safety.

PROmanager-Rx

This automated dispensing device can both store and dispense via a bar code scan thousands of solid oral medication doses in their original commercial unit dose packaging. Previously, RobotRx, which requires medications to be repackaged by separate equipment, was coupled with PacMed, an oral solid (tablet and capsule) repackager able to dispense and package strips of patient-specific doses. Together they were used to fill medications for a 24 hour period for all inpatients at Christiana and Wilmington hospitals. RobotRx manages a wide variety of dosage forms from injectable vials and syringes to topical patches, nebulizer vials, etc., as well as oral solids. PROmanager-Rx has replaced PacMed. The combined nightly cart fill includes about 7,500 doses for Christiana Hospital and Wilmington Hospital patients, and about 95 percent of the doses are filled by automation.

In the future, the Pharmacy plans to use PROmanager-Rx in combination with RobotRx to dispense first doses of new oral medication orders. The ability of PROmanager-Rx to bar-code scan each dose that is stored within improves accuracy by removing the risk of human error inherent in the process of a pharmacy technician filling a medication order with a pharmacist check. Consistent with RobotRx, it will not dispense an expired medication or a dose with a missing bar code.¹

DoseEdge Pharmacy Workflow Manager

Recently, you may have noticed a change in the appearance of labels on compounded IV medications within the health system. This was part of the incorporation of DoseEdge. DoseEdge software utilizes bar-code scanning and high-resolution photography to sort, track and aid in the preparation/verification of compounded IV medications.

Previously, pharmacists checked IV admixtures by looking at the drug vial and diluent used by the technician and would rely on the technician to communicate the process used to prepare the dose. This often consisted of an empty syringe drawn back to indicate the volume of drug used during preparation. DoseEdge incorporates the following features to improve both safety and efficiency:

- Sorting of doses to be prepped based on acuity to easily identify STAT orders that appear at the top of the work queue.
- Bar-code scanning of the drug, IV bag and diluent to ensure accuracy.
- Standardized compounding instructions displayed to the technician on a touchscreen monitor during preparation.
- High-resolution photos at each step of the compounding process to aid in pharmacist checking and allow remote checking from any workstation.

Currently, DoseEdge is being used in the preparation of an average of 203 adult IV doses per day at the Christiana campus. The eventual goal is to utilize DoseEdge to manage neonatal preparations, both IV and oral liquid doses, and to integrate DoseEdge into the workflow at the Wilmington campus.

The Department of Pharmacy is constantly striving to reach a goal of zero dispensing errors, and while we are not quite there yet, we are excited to embrace the technology that will aid us in serving our patients as safely as possible. ●

References:

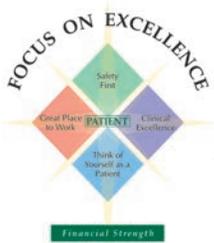
1. PROmanager-Rx™ [Internet]. Cranberry Township (PA): Aesynt. [cited 2014 May 23]. Available from: <http://aesynt.com/promanager-rx>.
2. DoseEdge Pharmacy Workflow Manager [Internet]. Baxter. [cited 2014 May 23]. Available from: <http://www.baxtermedicationdeliveryproducts.com/pharmacy-workflow/doseedge.html>.



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CHRISTIANA CARE GOLF & TENNIS CLASSIC

MAY 21, 2015  DUPONT COUNTRY CLUB



An exciting day of golf and tennis on the magnificent natural surroundings of the DuPont Country Club as we celebrate the 24th Anniversary of the Christiana Care Classic. Join friends and associates for friendly competition on the courses or courts.

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