Neurologic Complications of Cancer Service Aims to Improve Quality of Life

Cancer survivorship—not just living beyond a cancer diagnosis—is about thriving. Quality of life is critical for holistic healing in the fight against cancer, both during active treatment and in the time afterward.

"Earlier cancer diagnoses and advances in treatment have resulted in more patients living beyond cancer. This increase in survivorship has also resulted in increased neurologic complications from cancer therapies, creating a new need that our clinical care model must address," explains George Atweh, MD, director of the UC Cancer Institute and hematology oncology division chief.

In partnership with the UC College of Medicine Department of Neurology and the Brain Tumor Center at the UC Neuroscience Institute, the UC Cancer Institute now offers a dedicated clinic for managing neurologic complications of cancer—both acute and chronic.

"Fifteen percent of cancer patients will develop neurologic complications (excluding depression), and many of those are treatable," says Richard Curry, MD, the UC Health neurologist with additional fellowship training in neuro-oncology offering this new service.

"Most side effects occur during active treatment, so addressing them effectively is critical for maintaining patient morale. Treatment can be emotionally and physically tiring."

Curry works side-by-side with both UC Cancer Institute and community oncologists to help patients resolve their symptoms faster.

"Traditionally, oncologists either manage the neurologic side effects of cancer treatment themselves or refer their patients to a general neurologist," Atweh explains. "Having specialized expertise in neurology in our cancer center provides a new level of expertise and service that does not exist elsewhere. This is a new model that responds directly to the holistic care needs of our patients, addressing quality of life issues versus strictly addressing a person's cancer."

Common side effects of cancer treatment
- chronic headaches
- loss of feeling in fingers/feet/face
- seizures
- stroke
- leptomeningial disease
- spasticity

>> APPOINTMENTS & REFERRALS
Appointments for the neurologic complications of cancer service are available Thursdays in the UC Health Barrett Center, 234 Goodman St. in Clifton, by calling UC Health Hematology Oncology at 513-584-8500.

To reach UC Health Neurology, call 513-475-8730.
2012 Closes With Epic Implemented Throughout UC Health

COLLEAGUES,

This has been a year of many accomplishments for the Epic Electronic Health Record (EHR) at UC Health. It’s also marked by significant cooperation among numerous departments.

Our information systems and technology department devoted the winter months to testing and fine-tuning the system while also working with training and development associates to prepare training materials. UC Health proceeded to educate nearly 3,400 people about how to use the ambulatory portion of Epic for the July 10 go-live.

By Oct. 27, we had provided Epic training for an additional 8,000 people to serve our inpatients and manage our financial records.

We also converted thousands of existing patient records to Epic—in some cases manually from paper files—so that patients and providers could continue the outstanding care UC Health is known for.

As we close out the year, UC Health has already achieved several of the goals established for Epic at our organization, including:

- Providing access to a common medical record by multiple users from any location.
- Improving communications between care providers and patients as well as between providers.
- Enhancing clinical integration of records and care between inpatient and outpatient providers.
- Sharpening our competitive edge against other health care providers.

Along the way to reaching our big-picture milestones, we’ve implemented technologies that directly link Epic to the medical equipment and processes we engage daily to care for patients.

For example, we’ve installed 1,447 bar-code scanners, which are used by hospital caregivers to scan medications and patients’ identification wristbands to ensure accuracy and record medication administrations in Epic.

We’ve also interfaced 400 bedside patient monitors, 146 ventilators, 54 anesthesia machines and 12 dialysis machines with Epic such that they automatically update the EHR. This new integration makes it possible for caregivers to efficiently review and update patient records anywhere.

Granted, it’s been a challenge migrating a health care system of our size to Epic in such a short period of time. But the results are well worth the effort, and we’re now in a position to make further strides in 2013.

JAY BROWN
Senior Vice President and Chief Information Officer
UC Health
In order to deliver the most effective, high-quality care, there must be regulation in place to keep hazards to a minimum.

Infection control within the UC Health system is where these checks and balances begin, and Madhuri Sopirala, MD, MPH, medical director of infection control at University Hospital, says there are a number of changes on the horizon to ensure that the system is doing its best to stop hospital-acquired infections before they begin.

“Federal and state regulatory parties expect hospitals to become more accountable for preventable infections,” says Sopirala, who also serves as an associate professor of infectious diseases at the UC College of Medicine.

“Hospitals will no longer be reimbursed for certain hospital-acquired infections, like central line infections and catheter-associated urinary tract infections, which can be prevented by making simple changes. In fact, there is a culture change from ‘infection control’ to ‘infection prevention.’”

Sopirala says that the first priority in any medical system is delivering efficient care and ensuring patient safety, but infections also are very costly to treat, and preventing them will save the patient and the system time and money.

“Modestly, it costs around $40,000 to treat a central line infection,” she says. “For a MRSA surgical site infection, it costs around $100,000—not to mention extended stay, additional treatment and medication for the patient. It’s a lot of money, it causes a lot of damage—but it’s completely preventable in most cases.”

Sopirala says there are policies and evaluations in place that administration and staff will be re-examining to determine, align, update and implement best practices.

“This is a multidisciplinary effort,” she says. “There isn’t one person or one department who is responsible for this initiative—it’s everyone. We need to put ourselves in our patrons’ shoes in order to really see how important infection prevention is in a hospital setting.”

Sopirala says the key to achieving this is to empower everyone to make sure things are getting done correctly.

“We want awareness and ownership of these initiatives from the top down as well as the bottom up,” she says. “Everyone needs to be engaged in the process and own it. We want people working together to make sure we are doing everything we can to deliver the best patient care possible.”

Preventing Infections at UC Health

UC Health will build on the following methods to improve efficacy and patient safety:

- **Reducing preoperative risk** and comorbidity with health exams prior to surgery.
- **Preoperative screening** for *Staphylococcus aureus* and MRSA in all populations.
- **Educating all members of the staff** on infection control policies and procedures.
- Empowering all staff to hold each other accountable and help each other adhere to the policy at all times.
- Making sure that visitors to the system, like vendors, are up-to-date on policies and adhere to them.
- Consistently using checklists for device placements and standardizing surgical and non-surgical dressings.
- Implementation of an antimicrobial stewardship to optimize antibiotic use in the hospital, helping to avoid certain conditions like *C. difficile* or MRSA.

“There isn’t one person or one department who is RESPONSIBLE for this initiative—it’s everyone.”

Madhuri Sopirala, MD, MPH

Infection control
Expert Obstetric Care Available at UC Health
More than 2,600 babies delivered annually at Clifton hospital

UC Health University Hospital’s Women’s Health Services offers a variety of obstetric options, from prenatal checkups to post-partum care.

“We delivered more than 2,600 babies last year,” said Kaye Scott, nurse and clinical director of obstetrics for the Neonatal Intensive Care Unit (NICU). “Women choose University Hospital to deliver because we offer a wide range of maternity services in a family-centered, nurturing environment.”

The team has made it a priority to ensure patients are fully educated and prepared for the new addition to their families.

Staff members lead classes on topics such as a prepared childbirth overview, natural childbirth techniques, cesarean delivery and breastfeeding as well as a refresher course for those who already have children and a class for siblings on their new role as the big brother or sister.

A comfortable environment is provided for patients and families throughout their stay to facilitate the involvement of families and friends in the birthing process.

Board-certified lactation consultants help new mothers with basic breastfeeding challenges and are available to answer questions after discharge. Care coordinators are available to act as a liaison between the mother and her care provider to ensure any social or physical issues are addressed before the birth of the baby, if needed.

“We want the best birth experience possible for our patients,” says Scott.

In the event of a high-risk pregnancy: “Patients are in the right place,” says Scott. “We’re designated as a Level III NICU.”

The distinction—reflecting standards defined by the American Academy of Pediatrics—indicates the unit is prepared for premature and other high-risk births.

Women’s Outpatient Services
From adolescence through childbearing age, menopause and beyond, UC Health offers a full-range of women’s care including:

- general obstetrics and gynecology
- maternal fetal medicine and high-risk obstetrics
- gynecologic oncology
- reproductive endocrinology and infertility
- urogynecology
- adolescent and pediatric gynecology

The hospital’s NICU includes neonatologists and a team of high-risk maternal fetal specialists who work together to manage pregnancies and expertly address a variety of situations with a moment’s notice.

**APPOINTMENTS & REFERRALS**
Learn more about University Hospital’s labor/delivery unit and classes at universityhospital.uchealth.com/services/women or call 513-584-3999.

For appointments and referrals to UC Health Obstetrics and Gynecology, call 513-475-8588.

A full list of obstetricians/gynecologists is available at ucphysicians.com.

**Partnership in Fetal Care Center**
University Hospital has the unique opportunity to partner with Cincinnati Children’s Hospital Medical Center and Good Samaritan in the Fetal Care Center of Cincinnati program.

In this collaboration, experts from the three hospitals provide care to high-risk mothers from prenatal diagnosis and fetal treatment to delivery.

Founded in 2004, the Fetal Care Center of Cincinnati now serves about 400 patients each year. In 2011, patients came from 28 states. The program can be reached at 1-888-FETAL59.

“WOMEN CHOOSE UNIVERSITY HOSPITAL TO DELIVER because we offer a wide range of maternity services in a family-centered, nurturing environment.”

Kaye Scott, UC Health nurse and clinical director of obstetrics
University Hospital
Neonatal Intensive Care Unit
When Hoxworth Blood Center comes to mind, most people think of the leading blood donation facility for the Tri-state area. However, experts at the center do much more than collect blood. They offer a number of services that allow physicians within UC Health to provide care to patients.

Prostate Cancer Therapy
Patricia (Chris) Carey, MD, associate professor of pathology and laboratory medicine at UC and medical director at Hoxworth, says that in addition to Hoxworth providing blood supplies for trauma victims in the emergency room, hematology oncology patients or for patients undergoing surgery at UC Health University Hospital, the center serves as a collection site for a Food and Drug Administration (FDA)-approved prostate cancer therapy.

“The therapy, called Provenge, works by stimulating the patient’s own immune cells, already present in the blood, to battle the cancer,” she says. “Patients who are eligible for the treatment have their cells collected through leukapheresis process.”

Leukapheresis involves white blood cells being separated from whole blood. With the Provenge treatment, the cells are shipped to a manufacturing facility where they are processed with a protein that functions as a cancer antigen and helps to activate the patient’s immune system. The cells are then infused back into the patient.

Carey says the treatment option must be prescribed by a physician, but that Hoxworth is an approved local collection site for this therapy and is also accredited by the American Association of Blood Banks as well as the Foundation for the Accreditation of Cellular Therapies and is licensed by the FDA.

“We’ve heard of physicians sending their patients out of town for collection when we’re right in their back yard,” she says.

Therapeutic Interventions
In addition, experts at Hoxworth offer a therapeutic intervention for patients with high LDL cholesterol who may not have success with traditional medical therapies. This instrumentation has been approved by the FDA for many years.

The treatment involves using a machine, Liposorber, which collects a patient’s blood from a vein in one arm, filters LDL from the plasma and returns the “cleaned” blood via the patient’s other arm. The process, called LDL cholesterol apheresis, takes two to three hours and is used for high-LDL—or “bad” cholesterol—patients weekly or biweekly depending on the patient’s needs.

Sue Pinkard, director of the therapeutic apheresis program at Hoxworth, said the process can lower LDL levels by 73 to 83 percent with one treatment.

“However, LDL levels begin to increase over time, requiring patients to continue the treatment at regular intervals,” she says. “The patients must also continue their cholesterol-lowering regimen as outlined by their clinician.”

Liposorber was designed specifically for patients who are at high risk for cardiovascular disease and for whom diet and maximum drug therapy have not been effective or well tolerated.

Pinkard says Hoxworth just received a new machine and is accepting new patients who are eligible for the therapy.

“Our ability to collect blood and process hematopoietic stem cells will also play a large role in the new bone marrow transplant program,” Carey adds. “We’re working side-by-side with physicians to enhance patient care.”

>> APPOINTMENTS & REFERRALS
To learn more about Hoxworth Blood Center, visit hoxworth.org. For information on Provenge or the Liposorber treatments, call 513-558-1333.
Larkin Appointed Director of UC Health Women’s Center

UC Health has purchased Lisa Larkin, MD & Associates, a Madisonville internal medicine and gynecology practice specializing in women’s health. Larkin is now director of the UC Health Women’s Center scheduled to open at the UC Health West Chester campus in mid-2013.

The women’s center will encompass 26,000 square feet—the entire fourth floor—of the UC Health Physician’s Office South, a 100,000-square-foot medical office building adjacent to UC Health West Chester Hospital. It will feature 47 exam rooms, large and small conference rooms, an on-site library and other resources.

As a patient-centered medical home, the women’s center will provide under one roof comprehensive, evidence-based, multispecialty medical care for women. The center’s vision is to offer the complete spectrum of care for women—from wellness and prevention to diagnosis and treatment—as well as clinical research and education programs for health professionals and the community. The center will emphasize a team-based approach, led by primary care physicians who partner with a patient and help direct her medical care throughout her life.

Organizational leaders and key stakeholders recently got a sneak peak of plans for the UC Health Women’s Center.

Here (right) Women’s Center Director Lisa Larkin, MD, tells the crowd about her vision and goals for the comprehensive initiative. Thomas Boat, MD (below left), UC College of Medicine dean, was one of several key medical campus leaders in attendance.

New Infectious Diseases Office

Peter Grubbs, MD, assistant professor and UC Health infectious diseases physician, opened a multi-session outpatient ambulatory infectious diseases clinic on the UC Health West Chester campus in September, increasing patient convenience and access.

Jackson and Wenzel Named ‘Great Leaders Under 40’

Jennifer Jackson, University Hospital vice president and chief nursing officer, and K. Grant Wenzel, West Chester Hospital director of marketing and public relations, were featured as Great Leaders Under 40 in the fall 2012 issue of Venue Magazine.

Sleep Center Hosts Symposium

The UC Health Sleep Center sponsored the third annual Greater Cincinnati Sleep Medicine Symposium on Oct. 12 with Victoria Surdulescu, MD, Virgil Wooten, MD, UC Health sleep experts, and Shawn Bailey, sleep center manager, among those presenting.

‘Research Week’ a Success

UC Health celebrated collaboration and innovation during Research Week Nov. 13-16. An opening ceremony kicked off the week’s events and included comments from Stephen Strakowski, MD, vice president of research at UC Health, and deans from UC’s colleges of allied health sciences, nursing and pharmacy. Two patients benefiting from clinical research offered comments about their experiences. A poster session, biomarker symposium and nursing and allied health research day rounded out the week. Poster session participants receiving honors included Ana Luisa Kadekaro, PhD, research assistant professor in the UC College of Medicine dermatology department (Scientific Merit), and Laura Sauerbeck, a research assistant professor and nurse within the department of neurology (People’s Choice).
A recent agreement between UC Health and the University of Cincinnati provides all UC Health associates access to health sciences and research-level library collections and services through UC Libraries’ Donald C. Harrison Health Sciences Library.

In addition to the health sciences specific resources, UC Health associates will also have access to the entire collection of more than 4.2 million volumes available throughout UC Libraries as well as the more than 48 million items found in ohiolINK (90 academic libraries in Ohio).

Library services provided to UC Health associates include full access to electronic resources, borrowing privileges at all 10 UC libraries, personalized reference service from health sciences librarians, a Web portal optimized for viewing library resources on mobile devices, document delivery and more.

To access library resources and services, UC Health associates need only to register online at http://guides.libraries.uc.edu/uchealth. This website will also serve as UC Health associates’ gateway to the information resources and services provided by the Health Sciences Library and UC Libraries.

For more information about the resources and services available to UC Health associates, or to schedule an instruction session, contact: Leslie Schick at 513-558-4321, leslie.schick@uc.edu or Kristen Burgess at 513-558-3071, kristen.burgess@uc.edu.

Library resources include:
• More than 800 online databases.
• More than 30,000 health sciences e-books and 149,000 e-books.
• More than 200,000 on-site print volumes.
• Point-of-care resources including MD Consult and DynaMed.
• Evidence-based resources including ACP Journal Club, ACP Pier and Cochrane Library.
• Patient-education resources from McGraw Hill’s Access Series, Medline Plus, MD Consult and more.
• A suite of nursing reference tools.

Metro Aviation—which operates 26 air medical transport programs including UC Health’s Air Care service, in 18 states—displayed the system’s new EC145 Eurocopter at the 2012 Air Medical Transport Conference in Seattle. The October event drew nearly 2,500 emergency medical and critical care professionals from around the world and is the largest convention and exposition of its kind.

**DISEASE AWARENESS EVENTS ACROSS UC HEALTH**

In an effort to educate associates as well as community members, UC Health hosted several informational events throughout October and November. These included two public reception/information fairs for breast cancer and pancreatic cancer held by the UC Cancer Institute at the UC Health Barrett Center and a pulmonary hypertension informational booth in UC Health University Hospital cafeteria. Here, pulmonary hypertension patient Barb Lisner is shown handing out information on pulmonary hypertension, a disease that primarily affects women.

**UC Library Agreement Offers Access to UC Health Associates**

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**UC Health Helicopter Featured at Transport Conference**

Metro Aviation—which operates 26 air medical transport programs including UC Health’s Air Care service, in 18 states—displayed the system’s new EC145 Eurocopter at the 2012 Air Medical Transport Conference in Seattle. The October event drew nearly 2,500 emergency medical and critical care professionals from around the world and is the largest convention and exposition of its kind.

**CLINICAL TRIAL SPOTLIGHT:**

**Heart Attack Study**

**WHAT:** Research study evaluating an investigational medication that may prevent blood clots from forming that cause heart attacks and stroke

**WHO:** Adults 50 years and older who have had at least 1 heart attack between 1 to 3 years ago and currently take aspirin to prevent new heart attacks

**COMPENSATION:** Participants will receive $25 for each completed visit.

**DETAILS:** Call 513-558-CARD (2273) or email heart@ucmail.uc.edu. Please reference “Heart Attack Study”
Kelly Marsh had no warning that her life was about to change forever. She and her husband, Brad, had just celebrated a relaxing anniversary weekend in New Orleans in August 2009.

The return trip wouldn’t take them directly home, however, because Marsh collapsed at Greater Cincinnati/Northern Kentucky International Airport, suffering an acute hemorrhagic stroke at the age of 36.

Emergency brain surgery saved Marsh’s life, but after two weeks in UC Health University Hospital’s neurological intensive care unit and five more weeks as an inpatient at UC Health Drake Center, she couldn’t read, write, talk or walk.

“I also couldn’t move or feel my right arm, hand or leg, and my vision was limited,” said Marsh. “I thought I was dreaming, but eventually I realized that it was real and serious, so I fought to survive.”

The entire inpatient staff at Drake Center helped her relearn independent activities, communication and cognitive skills. Mark Goddard, MD, UC Health physical medicine and rehabilitation (PMR) specialist and chair of the UC College of Medicine PMR department, started her therapy when she was still trying to make sense of what had happened.

Philip Theodosopoulos, MD, a neurosurgeon with the UC Neuroscience Institute and associate professor at UC, performed a cranioplasty surgery at University Hospital that Marsh credits with restoring some memories and skills.

“Being able to go home within seven weeks is a testament to everyone’s efforts, as well as my own,” said Marsh.

Outpatient therapy helped Marsh to improve further, but she was determined to regain total independence. She wanted to travel with her husband, drive a car, read novels and exercise.

After consulting with her doctors and investigating online, Marsh enrolled in Drake Center’s START (Stroke Team Assessment and Recovery Treatment) program eight months after her stroke.

An interdisciplinary team of stroke specialists assessed her progress and guided her next steps.

“They gave me access to therapies and technologies, and most importantly, Brad and I found a way to centralize my long-term recovery in one place,” she said.

Marsh credits Brett Kissela, MD, UC Health neurologist and UC professor, and Goddard—as well as their team—for taking ownership of her long-term care plan, including therapy, drug regimen and botox and phenol block injections.

She also had reconstructive leg surgery with Ryan Finnan, MD, a UC Health orthopaedic surgeon.

Marsh said, “There are so many people who supported me along the way, including my long-time primary care physician, Dr. Lisa Larkin, as well as my family, friends and most importantly my husband, who is my strongest advocate.”

Kelly Marsh and husband Brad