Ensuring best care for patients with diabetes

Whether a patient has a history of diabetes, is newly diagnosed or develops a glucose condition related to another disorder or treatment, the patient will receive the same consistent and exceptional care for diabetes in every unit within Ohio State’s Wexner Medical Center. That’s due in large part to DURN – the Diabetes Unit Resource Nurses.

“These nurses are the diabetes experts, the champions, at the unit level,” explains Cara Harris, NP, CDE, of University Hospital East.

The “diabetes epidemic” among the general population has been documented by many, including the Centers for Disease Control and Prevention, which reports: “From 1980 through 2010, the crude prevalence of diagnosed diabetes increased by 176% (from 2.5% to 6.9%).” These statistics are reflected in admissions to Ohio State’s hospitals.

“We are seeing an increasing number of patients with diabetes. It’s a massive issue among our patient population,” adds Dawn Black, RN, BSN, of University Hospital. “Whether patients are being cared for in The James, at UH or the Ross, or in Rehab, diabetes can impact the patient’s ability to get well. In fact, it was awareness of the rise of diabetes among OSU Health System patients that prompted Kwame Osei, MD, FACE, FACP, in January 2006 to initiate DURN, the system-wide program of care for diabetes in every unit within Ohio State’s Wexner Medical Center. Patients at Ohio State’s Wexner Medical Center receive consistent, exceptional care for their diabetes thanks to the DURN program. Representing DURN staff are (from left): Cara Harris, NP, CDE; Dianna Moone, RN, BSN; Deidre Morris, RN, BSN; and Dawn Black, RN, BSN.

"DURN staff are the leaders on the nursing unit that directly impact change. These nurses do a great job in the care of any patient with diabetes and also to identify patients in need of assistance with their diabetes and enter consults. The nurses’ duties may be as technical as helping staff and patients with a new device or medication, or as mundane as doing inventory and restocking the unit’s educational materials. Harris and Black call these staff members “Resource Nurses” and also “nurses with a passion for helping others.” The nurses are staff who enjoy learning, growing professionally and doing whatever is needed to elevate the level of care provided for their unit’s patients.

“DURN staff are the leaders on the nursing unit that directly impact change and positive outcomes with diabetes care. These nurses do a great job in the care of the diabetic patient. They take ownership of this role and help drive optimal care for all of our diabetic patients,” Black explains. “Each unit is a little different. These are the nurses who know how to work within that unit and are best at effecting change,” adds Harris, explaining that DURN allows for consistent care that is personalized to the patient’s condition and treatment as well as the unit’s most effective operational organization. DURN staff gather quarterly through conferences held and organized by the Diabetes Team to learn and share information, keeping each other apprised of advances in diabetes care so that they can bring this information back to their units. They can also submit items to a newsletter shared among nursing staff.

Since DURN’s inception, program leaders working with Medical Center teams have instituted many positive changes that benefit patients and the staff who care for them. These include updated target glucose ranges, carbohydrate counting, insulin devices, insulin drip protocol revision and diabetes guidelines implementation. DURN has also worked with our Medical Center’s Patient Education team to assist with the rollout for patient and staff training. In 2007, Ohio State created the Diabetes Research Center (DRC), an outpatient clinic for care and education. The DRC recently moved to CarePoint East. Referral to the DRC helps improve continuity of care and strengthen the patient education begun on an inpatient basis.

In the end, the educated patient who has easy access to healthcare resources is better able to manage the diabetes, which can result in better health, fewer admissions and greater patient satisfaction.

The Diabetes Unit Resource Nurses (DURN) program helps us Create the Future Now through effective and efficient use of clinical resources that puts our patients’ needs first and improves patient outcomes and satisfaction.

- Approximately one-fourth (22 percent) of all patients admitted to Ohio State’s Wexner Medical Center have some form of diabetes in their history.
- While hospitalized, non-diabetic patients can experience a glycemic (either high- or low-blood sugar) episode related to stress, surgery, medications or other causes.
- Diabetes Unit Resource Nurses, working with unit care providers, ensure that patients receive consistent, team-coordinated care related to their blood-sugar levels.
- The commitment of staff, under the leadership of DURN, results in better patient outcomes and increased patient satisfaction.
- DURN is just one of the reasons that Ohio State’s Wexner Medical Center ranked 27th nationally in the most recent U.S. News & World Report “America’s Best Hospitals” ratings.
But for Ohio State…
Patient helps advance DMD clinical trial

Ohio State medical experts are teaming up with a patient and his family to advance the care of those with Duchenne Muscular Dystrophy (DMD).

While Ohio State researchers provide the scientific work and data to determine whether a new treatment plan with two currently used medications can benefit DMD patients, Ryan Ballou and his family are providing awareness, fundraising support and inspiration.

As a result, Ohio State is now enrolling patients in a clinical trial that may prevent or lessen the heart damage common among those with DMD and also help preserve skeletal muscle.

DMD is an inherited, progressive form of muscular dystrophy that occurs in about one of every 3,600 male births and dramatically shortens life expectancy. The disease affects all voluntary muscles. As it progresses, DMD involves the muscles that control breathing and also the heart.

Typically, medications to treat DMD-associated heart scarring are administered after there is noticeable evidence of heart damage.

However, in laboratory studies, basic scientists determined that more heart muscle function could be preserved if these medications, lisinopril and spironolactone, were administered much earlier.

And, there’s another benefit: “While both lisinopril and spironolactone are shown to be extremely effective in patients with cardiovascular disease, we were surprised by their ability to prevent skeletal muscle damage as well,” explains Ohio State’s Subha Raman, MD, of Cardiovascular Medicine, who is medical director of Cardiac MR and CT and a nationally recognized expert in cardiac imaging.

“We are very encouraged by these results, yet we know clinical trials are needed,” Raman said in summer 2011 shortly after the study was published in the American Heart Association’s journal Circulation.

Joining Raman in this research were Jill Rafael-Fortney, PhD, of Molecular and Cellular Biochemistry, and Paul Janssen, PhD, of Physiology and Cell Biology.

“If these results directly translate in our future clinical trials, it could mean that DMD patients may never have to use wheelchairs and could live long and happy lives,” added co-author Rafael-Fortney.

“I’ve spent 20 years in DMD research and I hope these drugs will actually make life-changing improvements for patients.”

Yet, it’s often a long, costly road from lab studies through the clinical trials needed to develop better care.

Ryan Ballou, a patient with DMD, and his family decided they could do something to shorten that road and help others with muscular dystrophy.

For more than 20 years, Ryan had traveled with his dad from Pittsburgh to Ohio State’s Wexner Medical Center to be treated by Neurologist John Kissel, MD.

Kissel, aware that scientists at Ohio State’s Heart and Vascular Center had been working on a drug treatment to delay heart failure among DMD patients, referred Ryan to the study team.

Ryan, now 24 years old, has been taking the medications to delay heart failure for more than five years.

“I’ve been ahead of the curve,” says Ryan of the progression of his disease. “I walk longer than most people and I still have a lot of strength in my arms.”

And, here’s how Ryan explains the benefit to his heart: “They use an MRI scan to take a three-dimensional picture of my heart and can see what scarring is already there, caused by the muscular dystrophy. There was scarring to begin with, when I first went, but since I’ve been taking the medicine there’s been no more scarring.”

After seeing the scans, Ryan’s father, Ty Ballou, reports: “Ryan was saying, ‘Dad, how’s my heart look?’ And I’m looking at the three-dimensional image and it was — even today, that was five years ago — that never, never gets old — it’s just utterly amazing.”

The Ballou’s were so inspired by the Ohio State team’s work that they have raised more than $112,000 through their charity, Ballou Skies, to support DMD research at Ohio State.

The Ballou’s support has definitely made an impact. An Ohio State clinical trial based upon this research is now accepting patients.

“With their inspiration and support, we’ve accomplished in less than a year what would typically require three-to-five years, if pursuing traditional means of support,” says Raman.

In addition to the promise this research holds for DMD patients, the investigators believe it could also benefit those with other conditions involving heart and skeletal muscle damage. This research has also been supported by the Beckman Foundation, the National Institutes of Health and the American Heart Association.

For information on this clinical trial, contact please email Beth.McCarthy@osumc.edu or call (614) 688-8020.

Ballou Skies

Ohio State researchers have found that two common drugs used to treat heart failure could also improve heart and muscle function in people with Duchenne muscular dystrophy (DMD). The findings so encouraged Ryan Ballou, a patient with DMD, and his family that they created a charity called Ballou Skies to help fund the research of Subha Raman, MD, and her Ohio State team.

“IT makes me very happy to know that I am actually having an active part in gaining funds for research,” says Ryan. “It’s kind of my outlook on life — you can’t let things keep you down and you can’t let things hold you back.”

Ryan (left) also supports his father, Ty, who participates in triathlons to raise awareness and dollars to support Ohio State’s DMD heart research. Ballou Skies donates 100 percent of all money raised to Ohio State DMD research.

Learn more about Ryan’s story and the Ballou family’s effort at ballouskies.com or by sending an email to Julie.dials@osumc.edu. You can make a donation to the Cardiomyopathy with Muscular Dystrophy Disease Research Fund #312965 or to the Heart/Muscular Degenerative Diseases Research Fund #313809 at give.osu.edu.
Patient Education reaches worldwide audience

Joe Meaney | The Ohio State University Wexner Medical Center

The Ohio State University Wexner Medical Center Patient Education website has been updated with new features and resources aimed at making it easier for people to find the information they need. The Patient Education website now includes an A-Z organization of health topics as well as expanded staff resources, including a guideline for creating new patient education resources and teaching materials.

The biggest change is the addition of optimized alpha-search capabilities. The new search function helps patients who may not know the exact spelling of what they are looking for. After entering the first few letters of a word, the search engine will suggest what the user may be searching for.

A vast collection of more than 3,000 health-related topics can be found on the Patient Education website including more than 300 topics in up to 18 languages to meet the needs of a diverse community.

The Patient Education website, which received 1.7 million hits in the 2012 fiscal year, is now more patient-friendly, with monthly health and wellness hot topics among other resources available on the home page.

"The Patient Education page has the largest number of hits across the entire hospital website," says Diane Moyer, associate director of Health System Patient Education. "Users from all over the United States and the world use these resources. We had people from the World Health Organization and other aid agencies asking to use materials from the site."

With an increased emphasis on personalized patient care, patients can find a link on the home page that will give them access to their OSU MyChart information, which allows them to request appointments, renew prescriptions, and review lab test results and health history. Other links to Health System resources are available on the Patient Education site under the Get Connected section.

Some medical information websites like WebMD offer information similar to Ohio State’s Patient Education website. However, Moyer explains that people without a medical or healthcare background sometimes find these sites more complicated due to the use of more technical language or medical jargon.

"The materials on the OSU website are easier to read and understand. It’s an issue of patient health literacy," says Moyer. "Our materials follow the newest plain language guidelines for health literacy. The Agency for Healthcare Research and Quality (AHRQ), Centers for Disease Control and Prevention (CDC), and hospital accreditation bodies expect that health information be in simple language and formatted to be easier to read.

"All of the materials on the website follow a similar format so that patients know what to expect and how to prepare for a test, procedure or surgery," says Moyer. "Other materials educate them about their diagnosis, treatment strategies, home care, and when to call the doctor if they have a question or concern. For patients, reading the materials often helps them to prepare for their next doctor visit by deciding what questions to ask or what they should expect in caring for themselves at home."

Any Ohio State clinician can add materials to the Patient Education resources through a review process. In addition, feedback is regularly gathered from clinicians and patients to determine the type of materials that should be added to the website.

Moyer hopes that the Patient Education website will have extensive video capabilities in the future for both internal and external use. Such materials will be helpful in educating the patient and family members about how a certain procedure or treatment will be performed. The creation of a mobile version of the Patient Education website is also in the works, thanks to the great work and collaboration with the IT team.

To see what’s new on the Patient Education website, visit patienteducation.osumc.edu.

‘Journey to Innovation’

Joe Meaney | The Ohio State University Wexner Medical Center

Kwame Osei, MD, FACP, FACE, did not have the luxury of running water or electricity growing up in Offinso-Ashanti, Ghana. Hot baths and breakfasts before school were a luxury. Osei and his siblings had to study under candlelight and kerosene lanterns at night. However, the child of Ghana had the fierce Ashanti warriors to look up to.

"Every child in the tribe knew about the Ashanti warriors. The Ashanti tribe prides itself on their fierce warriors. Fierce, not in the literal sense, but the ability to pursue greatness," says Osei.

With the support of his parents, who valued the education of their children, Osei earned his medical degree from the University of Ghana Medical School and has pursued greatness in his fight against diabetes ever since.

"When I came here, I was very interested in why it is that African-Americans had more problems with diabetes," says Osei, referring to his arrival to the United States in 1978. "In Ghana, you don't really see the difference because it's the same population. But over here you're comparing the Ashantis to the Caucasians. That's where the distinction was - a clear-cut distinction of more diabetes in African-Americans."

Osei completed his residency in Anatomical and Clinical Pathology at Hahnemann Medical College and was later a resident in Internal Medicine at Episcopal Hospital in Philadelphia. He is currently the director of the Division of Endocrinology, Diabetes and Metabolism, as well as the director of the Diabetes Research Center, at The Ohio State University. He holds the Ralph W. Kurtz Chair in Endocrinology. Osei is also a professor of Internal Medicine and Exercise Physiology.

Osei will chair the Second Global Diabetes Summit, which will be held in Columbus Nov. 14-17. He also chaired the first Summit in 2007. The Global Diabetes Summit brings together international experts to discuss the latest seminal outcomes in diabetes research and to formulate an interdisciplinary roadmap for the prevention, detection and treatment of diabetes and common co-morbidities.

Osei is optimistic about the future of medicine, which holds great promise for new discoveries and innovations as well as unparalleled opportunities to cure diseases and conditions such as diabetes, obesity and cancer. However, he believes that looking at the origin of the disease is paramount in finding ways to prevent it and, ultimately, in finding the cure.

"If I study the disease, I'm studying the end of the disease. I'm not studying how it got it," says Osei. "If we want to make any difference in any diseases, we have to understand the genesis, or the beginning of the disease, and how to prevent it."

See and hear Osei’s journey to Ohio State at go.osu.edu/P3R.

About ‘Journey to Innovation’

Diversity in people and ideas is a core value and strength of The Ohio State University and its Wexner Medical Center. The video series “Journey to Innovation” shares the stories of 12 foreign-born physicians who made Ohio State’s Wexner Medical Center their destination. Follow the series in Insight and online at YouTube.com/OSUMedicalCenter (search "Journey to Innovation").

"Journey to Innovation" was made possible by a grant from the OSU Medical Alumni Society; Ismail Nabeel, MBBS, MPH; the OSU Wexner Medical Center Diversity Council; and the Department of Marketing and Strategic Communications.
OHIO STATE’S DIABETES RESEARCH CENTER PRESENTS

The Second
Global Diabetes Summit
Focus on Health and Wellness: Life Choices

Saturday, November 17
Veterans Memorial Auditorium
300 W. Broad Street
Columbus, OH 43215

Registration opens at 7 a.m.

• Free diabetes and related health screenings (BP, eye check, foot care, etc.)
• Healthy cooking demonstrations
• Exercise classes
• Celebrity testimonials
• Panel discussions and workshops

Celebrity guests Dominique Wilkins, NBA Hall of Fame legend and vice president of Basketball for the Atlanta Hawks, and Oscar Joyner, president and chief operating officer of REACH Media, Inc. (Tom Joyner Morning Show, BlackAmericaWeb.com), will speak on their personal battles with diabetes and discuss their successful management strategies.

This event is FREE, but registration is required. Register at http://go.osu.edu/GDSCommunity.
Lunch will be provided.