Western New York
PHYSICIAN
VOLUME 3 / 2014
THE LOCAL VOICE OF PRACTICE MANAGEMENT AND THE BUSINESS OF MEDICINE

Changing the Tune of Obstetrics & Gynecology

Dr. Eugene Toy Leads RGHS's Dynamic Group

High Quality Mammography in Women with Breast Implants

Rising Number of Female Joint Replacements:
Area Providers Weigh In on Trends

From Our Hearts To Yours.
Introducing the HeartMatters Cardiac Rehab Program.

St. Ann's Community is proud to introduce HeartMatters, a new evidence based program that was developed in collaboration with Cardiologists and Cardiothoracic surgeons including Rochester General Hospital Chief of Cardiology, Gerald Gacioch, M.D. and St. Ann's Chief Medical Officer, Diane Kane, M.D.

HeartMatters provides the region's best program for patients with cardiac conditions such as heart failure, myocardial infarction and post cardiac surgery (i.e., CABG, valve replacement).

We recognize the uniqueness of each individual and will work with you to develop a plan of care that will improve your quality of life and reduce the likelihood of readmission back to the hospital. You and your family will receive the knowledge necessary to better manage your condition after returning home.

HeartMatters Cardiac Medical Director, Gerald Gacioch, M.D. and St. Ann's Chief Medical Officer, Diane Kane, M.D.

For more information or to learn how to preplan a rehab stay, **please call 585-697-6311 or visit stannscommunity.com.**

The HeartMatters cardiac rehab program is available at: St. Ann's Community, Irondequoit and St. Ann's Care Center, Cherry Ridge Campus in Webster.

ST. ANN'S COMMUNITY
Full of Life

Caring for The Most Important People on Earth

greater rochester Health foundation

Supported by a grant from Greater Rochester Health Foundation

Contents

WESTERN NEW YORK PHYSICIAN | VOLUME 3 | 2014

Cover Story

Clinical Features

Practice Management

Professional Liability

Medical Resources

Lifestyle

Medical Research

Cover Photo: Lynne Tseng

Andrea Sperry, publisher
WNYPhysician@gmail.com
(585) 721-5238

Visit us Online

www.WNYPhysician.com

Welcome to Volume 3 - 2014 of *Western New York Physician* where you will find informative stories and articles *about and for* physicians in western NY.

Women's Health is the theme of this issue and our cover profile highlights Dr. Eugene Toy who serves in the dual role of Chief of Obstetrics and Gynecology and Director of Gynecologic Oncology at RGHS. Hear how one of our regions leaders in women's health has journeyed from the conservatory in the world-renowned Julliard School in NYC to leading the RGHS Department of OB/GYN Services and Gynecologic Oncology. With his patient-centered sensitivity and approachable and skilled leadership skills, Dr. Toy is poised to advance the care and access of women's health services in our region.

In the orthopaedic discussion we hear from surgeons Drs. Gregory Lewish and Frank Pupparo as they discuss the growing number of joint replacements in female patients specifically of the hip and knee. While advancements in surgical techniques, implant design and therapeutic approaches are resulting in surgical success and significant quality of life improvements for patients, these doctors shed light on why a growing number of women young and old experience joint conditions and highlight prevention as the most powerful tool to prevent joint degeneration. Since much of the surgical success is dependent on the patient's commitment to post-operative rehabilitation, Sharon Osborne, Director of Rehabilitation Services at St. Ann's Community, comments on the nuances of transitional care and the special considerations for patients with co-morbidities.

Participate in the Conversation

I continue to be pleased to hear from many readers wishing to contribute articles to future issues. Sharing your expertise is a valuable way to communicate with your medical colleagues. If you would like to be a part of an upcoming story or wish to submit an article, please email or call me to discuss timing and submission criteria. In the meantime, please enjoy the numerous other articles within the issue.

As always, we thank each of our supporting advertisers -- your continued partnership ensures that all physicians in the region benefit from this collaborative sharing of information and provides the WNYP editorial staff with a deep pool of expert resources for future interviews and articles.

Enjoy the summer.

Andrea

Western New York
PHYSICIAN

THE LOCAL VOICE OF PRACTICE MANAGEMENT AND THE BUSINESS OF MEDICINE

PUBLISHER
Andrea Sperry

MANAGING EDITOR
Julie Van Benthuysen

CREATIVE DIRECTOR
Lisa Mauro

PHOTOGRAPHY
Lynne Tseng
Department of Surgery
Rochester General Health System

CONTRIBUTORS
Julie Van Benthuysen
Sheema Chawla, MD
James E. Szalados, MD, MBA, Esq.
Joseph Carbone, DPM
Michael J. Schoppmann, Esq
Laura B. Segave, MBA, MS
Emilie Rowe, DPT
Elizabeth J Hughes, FNP
Wade Hedegard, MD
Nathan Odom, MD
URMC Press

CONTACT US
For information on being highlighted in a cover story or special feature, article submission, or advertising in
Western New York Physician
WNYPhysician@gmail.com
Phone: 585.721.5238

E cigarettes: "Vaping" Under Fire

Because e-cigarettes produce a vapor rather than smoke, using them is commonly called "vaping". According to Centers for Disease Control and Prevention (CDC)about 1 in 5 cigarette smokers in the United States have tried them, and they are available everywhere -- in retail outlets and on the Internet . There are more than 250 brands of e-cigarettes for sale in the United States, making it difficult to characterize e-cigarettes as a single product. They were first imported from China in 2007.

What are E-cigarettes?

E-cigarettes may or may not resemble a tobacco cigarette and typically contain propylene glycol, a chemical used for theatrical smoke and is also an FDA-approved food additive commonly found in deodorants, moisturizers and toothpaste. They also contain carcinogens and toxic chemicals, such as diethylene glycol, an ingredient in antifreeze, as well as small amounts of tobacco-specific nitrosamines. Many e-cigarettes also deliver nicotine. The level of nicotine varies, some offer nicotine of varying strengths from no nicotine to 13-16milligrams which amounts to about 250 "puffs".

Are they regulated?

At the present time, they are not. United States Food and Drug Administration (FDA) sought to ban e-cigarettes as unapproved drug-delivery devices in 2008. That would require drug companies to disclose the ingredients and conform to certain standards and restrict sales to minors. However, some states and municipalities like New York city have enacted bans on e cigarettes in public areas where tobacco smoking is not permitted.

E-Cigarettes: the Goldilocks effect

The "good" about E-cigarettes

There is general agreement among scientists in the field that e-cigarettes are almost certainly less harmful than regular cigarettes for their users, at least in the short term. It is believed that secondhand e-cigarette vapor is less dangerous to bystanders than secondhand cigarette smoke is. The sensation of using an e-cigarette may satisfy the cravings of some smokers more completely than other nicotine replacement products such as patches or gum. In a new study in the medical journal Lancet in 2013, e- cigarettes might be slightly more effective than nicotine patches in helping people quit smoking and were slightly better than placebo, which contained no nicotine, but the differences were minor.

The "bad" about E-cigarettes

Tests by the U.S. FDA found that some e-cigarettes are contaminated with dangerous chemicals, including some that can cause cancer. Until e-cigarettes are regulated, users cannot be sure of what they are inhaling. As the head of the American Heart Association said: "There is no such thing as a safer cigarette."

The "ugly" about E-cigarettes

A lot is unknown about them. The have been around for only 10 years in China and about 7 years in the United States. There are no clinical guidelines that recommend the use of e-cigarettes for smoking cessation because of lack of randomized data. They are not approved by the FDA for smoking cessation. There is also concern that E cigarettes could entice young children to try them, who would then get hooked on the nicotine.

What do I tell my patients as an oncologist?

First, I tell my patients to stop smoking cigarettes immediately. There needs to be an urgency to get patients to stop smoking because the adverse effects of continued smoking can be immediate and severe. I explain to the patients that the safety and effectiveness of vaping are not fully understood, nor is there any evidence to suggest that e-cigarettes are safer or more effective than existing FDA approved smoking cessation methods. Patients could use their motivation to quit smoking. They could also try one or more of the options that can help them quit, such as a telephone quitline; one or a combination of the 7 FDA-approved cessation medications -5 nicotine replacements (gum, patch, inhaler, lozenges, and nasal spray) and 2 prescription medications (bupropion and varenicline); and/or counseling from a qualified health care professional.

Resources
Electronic cigarettes (e-cigarettes) CA: A Cancer Journal for Clinicians. 14 MAR 2014.
E-cigarettes. Still many questions. Consumer Reports. March 2014

Sheema Chawla

I am a Radiation Oncologist at Rochester General Hospital. I did my fellowship and residency training from University of Rochester. I see a myriad of cancer patients and have a keen interest in treating lung cancer, breast cancer, central nervous system and Gastrointestinal cancer. I specialize in doing stereotactic body and brain radiosurgery, that is treating small localized tumors in the body and brain with highly focused radiation. I like to participate in North American trials and I am principle investigator of some of the Radiation Oncology trials at Rochester General hospital. I authored articles in peer reviewed journals and have given several presentations in national conferences.

My philosophy is that the patient comes first. I strive to know my patients and their family's emotional and functional needs and I try to tailor my approach to meet those needs. I also feel very privileged as many cancer patients and their families allow me to see some of the details of their lives as we take each step of the treatment process. I feel that many cancer patients have a perspective of life that enriched and challenged me as a physician and as a person. I felt that becoming a doctor was a perfect way to combine my interests in sciences and community service.

Q & A with Nathan Odom, MD

What is a PMR physician/physiatrist?

A physiatrist (a physician trained in physical medicine and rehabilitation) treats patients with a variety of conditions and illnesses that affect mobility, function, and quality of life. In the acute inpatient rehabilitation setting, this is divided into the spectra of neuro-rehabilitation, such as spinal cord injury, stroke, multiple sclerosis and traumatic brain injury. Other types of inpatients we treat have sustained major multiple trauma, or children with acquired or congenital illness, and we also treat patients needing to undergo rehabilitation from cancer, debility from a major hospital course, and patients with transplant, such as cardiac or liver.

A physiatrist manages the daily medical care of these patients; as you can see, a rehabilitation unit includes patients with an incredibly diverse range of medical conditions. In the outpatient setting, we continue to see these patients as they re-engage into the community, but also treat patients with a less acute illnesses that affect daily function and quality of life--such as sports related injuries, musculoskeletal conditions and back pain, central and peripheral nervous system diseases, and pain that emanates from many various etiologies.

Why did you join the field of physiatry?

When I think back to many years ago when I formed the decision to pursue medicine, I had a love of learning human physiology, but I also held a passion for the human, personal component and story that is far removed from a strict textbook--such as helping a patient reach a health related decision in a very complex medical, societal, and resource-limited world. Physical medicine and rehabilitation carries much of its foundations in this mindset. There are often several ways to achieve a desired medical or functional outcome, and therefore both patient and physician can continue to embrace a truly creative range of solutions and goals.

What is a brain injury rehabilitation unit, and how does this specialize in neurological rehabilitation?

Like many inpatient and outpatient programs that specialize in a very unique subset of patient care, a brain injury unit such is certainly no exception. The Golisano Restorative Neurology and Rehabilitation Center (which treats patients with various acquired brain injury etiologies, such as traumatic and anoxic), is the essence of specialized care, in particular regarding the experience that staff, therapists, and providers bring to patient care.

For instance, a patient recently sustaining polytrauma and a severe traumatic brain injury will present with a multitude of complex medical, neurological, surgical, and behavioral management needs. For such complexity of care, an entire multidisciplinary team approach is essential: nurses who can engage in behavioral management techniques while still providing medical care, physicians trained in neuro-pharmacotherapy and complex organ system management and complication

Changing the Tune of Obstetrics & Gynecology

Dr. Eugene Toy Leads RGHS's Dynamic Group

By Julie Van Benthuysen

Photo credit: Lynne Tseng

As a Juilliard-trained classical pianist, changing careers to the world of women's health might seem like an illogical choice. But to Dr. Eugene Toy, the newly appointed Chief of Obstetrics and Gynecology at Rochester General Health System (RGHS), the move to medicine made more sense than some might think. "My piano studies were very intense and rewarding," says Dr. Toy, "but as time went on I was practicing more to win competitions than practicing to perform. Piano is a solo instrument, not an ensemble one." In medicine, however, it's all about a collaborative melody. "If I hadn't pursued music initially, I would have gone into the sciences earlier," he adds. "I knew I had an aptitude for it."

Photo credit: Lynne Tseng

Indeed, practicing to perform served him well along his medical training path. After receiving his Medical Doctorate from the Mount Sinai School of Medicine, and completing a residency in Obstetrics and Gynecology at the University of Rochester Medical Center, Dr. Toy pursued his fellowship in Gynecologic Oncology at Yale University School of Medicine. He became board certified in Obstetrics & Gynecology and Gynecologic Oncology, and has been practicing medicine in the Rochester area for nearly a dozen years.

In his new role at RGHS, which began last October, Dr. Toy also assumed the position of Director of Gynecologic Oncology. His pioneering use of robotics in gynecologic oncology surgery at Rochester General Hospital brings a heightened tenor to his dual roles. In addition to clinical and administrative duties, he remains an active researcher in scientific studies of cancer-causing proteins of the human papillomavirus (HPV).

"After an exhaustive search, we were delighted to find our new Chief of OB/GYN Services already within the Rochester General community," said Robert Mayo, MD, Chief Medical Officer. "Dr. Toy's exceptional clinical and administrative skills are matched by an intuitive patient-focused sensibility. We are extremely fortunate to have him rejoin our health system in this permanent and important role, as we continue to refine and enhance our OB/GYN, gynecologic oncology and robotic surgical offerings."

First in Gynecological Oncology

"My passion over the years has been in gynecological oncology," says Dr. Toy. "We've been doing cutting edge research, including the study of ovarian cancer and its origins, and we've gained tremendous expertise in other precancerous and cancerous conditions like HPV. I've loved the academic pursuits in the lab and writing for publications about our findings. Now in this new role, I can help bring together an even stronger team to grow our gynecologic oncology capabilities."

He notes that in the past, RGHS relied more heavily on services available elsewhere in town to support its patient base. "Now, being the first gyno/oncologist available here 24-7, we have a much clearer presence in this community. Our affiliation with the Lipson Cancer Center also allows for more depth of care."

On the clinical side, Dr. Toy acknowledges his fortune at beginning his robotics career at RGHS. "Back when the FDA approved robotics for gynecology almost a decade ago, it became a sort of springboard for my whole career. I recognized that what we could offer the Rochester community would be invaluable." Today, robotics has become the first choice for early detected, early stage cancers. "We've been able to validate it as a standard treatment for women that's now been adopted nationwide."

While his Rochester roots go back some time now, it's been the collaborative efforts along the way that have enabled him to branch out. "Having this training in MIS procedures and robotics early on allowed me to bring my knowledge and skill back to practice -- first at the University of Rochester, where I could help train others, and now within the RGHS."

Once Dr. Toy began performing robotics at Rochester General Hospital, the community referral base began to broaden his practice. "It put me in a positive light to eventually become an administrator." While he has enjoyed operating privileges across the Rochester health network, he ultimately saw RGHS as a natural fit. "My mission of providing the services to cancer patients will be fulfilled here," he says. "We're so privileged to have the right mix of technology and accessibility in this region."

Benefits of Robotics

RGHS is widely recognized as a national and regional leader in robotic surgical procedures; more than 7,000 robotic surgeries have been performed at RGH and Newark-Wayne Community Hospital, placing the health system in the top 2 percent of

providers nationwide by volume. In 2012, Rochester General Hospital was named an AAGL Center of Excellence in Minimally Invasive Gynecology, in recognition of the hospital's unparalleled commitment and ability to consistently deliver safe, effective care.

Facing any kind of gynecologic surgery can create a great deal of anxiety, he acknowledges. Traditional open gynecologic surgery—whereby larger incisions are made to access the reproductive organs—has been the standard approach when surgery is warranted. The discomfort after surgery and extended time away from normal daily activities that usually follows traditional surgery can understandably cause significant stress.

Fortunately, robotic surgery offers a minimally invasive option for complex or delicate gynecologic surgeries and is now one of the most accepted and effective treatments for a number of gynecologic conditions. Working collaboratively with patients and their primary physician, a team approach is taken to determine whether robotic surgery is a viable option. "We discuss with them the many benefits of robotic-assisted gynecologic surgery -- it minimizes the pain and risk associated with large incisions and reduces surgical trauma and scarring. Among other positives, our patients are far more likely to enjoy a faster recovery," he says.

Numerous conditions can be treated in this manner:

Endometrial cancer
Endometriosis
Menorrhagia
Uterine fibroids
Uterine prolapse
Vaginal prolapse

Treatments provided include:

Robotic Hysterectomy
Robotic Myomectomy
Robotic oophorectomy
Robotic Sacrocolpopexy
Tubal ligation

Enhancing His Team and Offerings

Putting together the most dynamic team possible has taken top billing for Dr. Toy. "We have very talented individuals and providers," he says. "We've seen progress in just these first eight months alone, capitalizing on an already robust department." This includes more baby deliveries than ever before. "We have a very busy nursery, but we've still managed to establish a community-based feel to a delivery hospital. We've also brought more complicated delivery capabilities into the equation, and manage newborns at a much younger age."

Understanding that each patient is unique with a different set of expectations about her lifestyle, health and sense of well-being means a more successful patient experience. "We want to address the issues that matter most to our patients, adapting and changing with them over time to continually offer the right care, information and treatments to meet their specific health needs at every stage of life."

From adolescence through pregnancy, childbirth, menopause and beyond, a woman's body and health needs change dramatically over time. "Our goal is to change the landscape of how we provide care to an individual and an individual's entire family in many cases."

Dr. Toy's team of providers also collaborates closely with the Rochester General Breast Center of Excellence to offer patients the top breast cancer care and treatment in the nation. Designated by the National Quality Measures for Breast Centers, RGHS represents the first Breast Center in the Rochester, NY region with three full-time breast surgeons. Additionally, RGHS is the only hospital in New York State to offer a Nurse Navigator program, with a Clinical Breast Navigator specifically dedicated to helping our breast cancer patients.

Through its Gynecology Care Center for Women with Disabilities, providers offer a complete range of specialized gynecology services to patients with cognitive, neurological and physical challenges. Dedicated experts work as a team to bring a high level of awareness, sensitivity and skill in a comfortable and respectful environment. Accommodations such as adjustable beds and a closely integrated relationship with dentists and other medical providers help remove barriers to physical wellness.

Growing Needs Looking Head

Over the next few years, Dr. Toy foresees a proactive recruitment of more specialized gyno/oncologists. We looked at our cancer database vs. the national database, and the average patient here is about six or seven years older than the national average. People are born here, grow up here and eventually come back here. This is where they receive their care." With the rise in aging baby boomers and the additional insured through

Obamacare, he anticipates high demand for more gyno/oncologist specialists

He predicts that more patients will also look more to uro/gynecology for their needs, from pelvic floor disorders to incontinence. "It's a large part of where our population's needs are as they age. Fortunately, successfully serving the healthcare needs in this region is steeped in tradition. It speaks to where we are as a medical community, and how we meet a growing need moving forward."

Rochester General Women's Health OB/GYN offers the full range of gynecology services, from adolescent and adult gynecology and annual exams, family planning and infertility care to MIS and robotic surgery for gynecology conditions. Obstetric services include routine and high-risk obstetrics; midwifery care; prenatal testing; obstetrical (including 3D & 4D) ultrasound; antenatal testing; childbirth and baby care education; personal support before, during and after labor and delivery; on-site breastfeeding instruction with certified lactation consultants.

Although it's been years in the making, doctors are just now becoming board certified for uro-gynecology, he says. "It's enabled us to standardize expectations." Over the years, for example, very complex procedures have been developed that have brought pelvic reconstruction to a new level. Additionally, the use of synthetic meshes for incontinence is becoming increasingly common and safe, enabling uro-gynecology to evolve into a strong specialty. Approximately 50% of all women experience Stress urinary incontinence (SUI), the involuntary leakage of urine with effort or exertion. More and more women are opting for the synthetic mesh sling when non-surgical options have been ineffective – resulting in shorter operative time, reduced pain and hospitalization and low rates of complication.

Pelvic floor reconstruction and incontinence surgery are only a few of the offerings Dr. Toy projects patients will begin to ask for in higher volumes down the road. "Patients should expect one-stop shopping," he says. "We're fortunate that people here in Rochester are very comfortable with their health care, especially when it comes to the more sub-specialized oncologic services. People in other parts of our country have a hard time getting that kind of access."

He's encouraged by the up and coming providers. "We have a smaller residency here – 16 residents in total, four per year, but over the years, we've had very talented individuals who have chosen to stay here. They've helped us really build our department from the ground up." He notes that now that the uro-gyno department has been finalized, the team can design a curriculum that helps build technical strength for the young doctors coming in. "We're very proud of the whole education process at RGHS. We hope more medical school residents will seize the opportunity to be part of a unique specialty. We want to foster their enthusiasm and work with them to deepen the strength of our MIS and robotics and technical expertise, especially with complicated cases."

Being part of such a strong academic center has given Dr. Toy numerous opportunities to use evidence-based technology that should entice more and more medical residents. "Right now, under 10% of our residents are males," he says. "Yet no other specialty practice offers it all. Medical students have the opportunity for so much exposure to a patient on so many levels over and beyond what they might experience in others."

So while Juilliard might appear to be a far cry from medical school, the intense training ground within both disciplines continues to serve Dr. Toy's patients well – some might say it's been music to their ears. "Having the opportunity to be on-site helps tremendously – seeing colleagues and patients day to day is critical for trust and collaboration. It's allowed us to connect with providers in our community, and it gives our patients the reassurance they need."

Photo credit: Lynne Tseng

Rising Number of Female Joint Replacements Area Providers Weigh In on Trends

By Julie Van Benthuysen

YEAR OVER YEAR, MORE AMERICAN WOMEN ARE CHOOSING partial or full joint replacement surgery to address conditions plaguing their hips and knees. A woman's different anatomical joint structure, and the impact of weight, hormonal changes and even childbirth, are all contributing to this growing trend.

Women are living longer, and with advanced age comes more potential orthopedic issues. Conversely, active younger women (even teens) are affected by joint conditions from sports and associated injuries, while the inactive, often obese younger female suffers from added joint pressure. Regardless of age, area healthcare providers are addressing more joint conditions to help their patients regain greater quality of life. Significant advancements in surgical techniques and therapeutic approaches are lending themselves well to the rate of success.

Recent statistics project that by 2030, two of the three million anticipated joint replacements will be performed on women -- a sizable leap from the 600,000 U.S. replacements performed today. Drs. Frank Pupparo of Greater Rochester Orthopaedics and Gregory Lewish, Chief of Surgery at Unity Hospital both note the rising numbers of joint replacements among female patients.

Common Issues Affecting Joints

These two busy surgeons acknowledge that based on the multiple factors affecting women's joints, and the growing elderly population; there may actually be a dearth of providers to handle the surgical cases down the road.

When it comes to the knee, there are numerous culprits. As the body's largest joint, the knee is anatomically complicated and prone to arthritis and osteoarthritis. As people age, joint cartilage starts to gradually or completely wear away, leaving no protection for joint bones from bone-on-bone contact. Bones may also begin to bulge, or stick out at the joint's end. Predisposing factors to knee osteoarthritis include abnormalities of knee joint function resulting from fractures, torn cartilage and ligaments. The associated wear and tear and joint pain limits normal range of motion and profoundly impacts activity levels and lifestyle. Other conditions include bursitis, tendinitis and gout.

"The general thinking is that women have a decreased bone density as they age, so their joint surfaces are not as well supported," says Dr. Pupparo. "There's more laxity in the joints, so the adverse loading of joints leads to earlier deterioration." Factor in obesity – which affects more women than men – and more problems arise.

Dr. Frank Pupparo of Greater Rochester Orthopaedics

Younger people, however, are also increasingly seeing their lives disrupted by arthritic pain. It's actually the active, athletic person who more often experiences accelerated cartilage degeneration, adds Dr. Lewish.

Physicians can help patients of all ages identify what's causing joint pain. Inflammation is the body's natural response to injury, so doctors and patients should recognize the clear warning signs of redness, swelling, heat and/or pain, early morning stiffness and skin changes. Arthritic joint pain can vary from a little uncomfortable to debilitating and lasting pain if not addressed proactively.

Critical Connection Between Hips and Knees

Hip stability might be the primary but most often overlooked issue facing women when it comes to joint injuries and ailments, say the doctors. As the lower body's 'control unit," the hip cuff governs the thigh, which interacts with the knee and affects foot positioning. Most back and hip problems occur because of improper mobility and stability and faulty utilization of the hips. Unfortunately, most women move from their knee joints rather than their hip joints, stimulating the quadriceps to fire up first. Absorbing this much force in the quads alone can encourage ACL and other leg injuries like shin splints and stress fractures.

Dr. Lewish has seen a much higher incidence of female ACL tears. "Part of the ACL and arthritis risk is the neuromuscular balance and anatomical shape of the femur, because the notch

is narrower," he says. Women's hips are slightly wider relative to their knees and often fall more toward the body's midline, creating a greater angle from knee to hip. "This presents a higher risk in athletic women – the knees come down at a funny angle when they jump." He encourages more pre-season training and exercises specifically before a sports activity to prevent injury.

Developing more femoral control by focusing on the hip cuff can help manage the control center for the knees and lower legs. Focusing on movements that challenge the hip rotators can help protect the knee and back. Treating osteoarthritis means focusing on decreasing pain and improving joint movement with exercises that keep joints flexible and improve muscle strength, heat/cold therapy for pain relief, and joint protection to prevent strain or stress. Exercise increases joint lubrication and strengthens the surrounding muscles, putting less stress on joints, increasing flexibility, muscle strength and energy.

Dr. Gregory Lewish, Chief of Surgery at Unity Hospital

These doctors agree that a woman's weight can become the single most important factor in joint conditions. "Being overweight puts an additional burden on your hips, knees, ankles and feet," says Dr. Lewish. "For every pound of weight, we put four pounds of pressure on our knee."

Innovations in Knee Replacements

When it comes to ACL tears, Dr. Lewish is encouraged by the research being done on cartilage damage. "More techniques are available now to repair the meniscus rather than removing it." One promising technique involves taking cartilage from a different part of the knee. Similar advancements have been made in total or partial knee replacements. When pain associated with osteoarthritis or injury becomes unmanageable, a range of techniques and prosthetic components now exist to replace part or all of the knee joint surfaces. According to the American Academy of Orthpaedic Surgeons, 1 in 20 Americans over age 50 has an artificial knee. MIS techniques are resulting in much less muscle dissection, blood loss and pain, shorter incisions and hospital stays, faster rehabilitation and improved range of motion.

"Knee replacements have only been around for about 40 years, so they're still considered a relatively new technology," says Dr. Lewish. "In that time, however, we've seen many improvements in design and technique, especially where female anatomical differences are taken into account. Studies were originally done on a man's knees, but because women have a narrower femur, their knee replacement requires a different design." Replacements today have a thinner, more contoured shape than traditional implants, providing more natural movement and preventing the implant from overhanging the bone and potentially pressing on or damaging the surrounding ligaments or tendons. When osteoarthritis only affects either the medial or lateral knee compartments, a total knee replacement may no longer even be necessary.

The replaced joints are also lasting twice as long – 20 years vs. ten. The techniques for revision are a lot better, and knee manufacturers have really stepped up to the plate, he adds. "A few years ago, patient-specific instrumentation became very popular." This includes MRIs or CAT scans before surgery to help delineate patient anatomy, enabling the manufacturer to design the knee to fit the exact patient. "It can definitely save time in the OR if it's a complicated case."

Beyond prosthesis design, however, other factors influence knee replacement surgery success, including patient selection, the extent of joint damage, accuracy of the surgical technique in terms of soft tissue balancing and limb alignment, and post-operative rehab.

As more women outlive their spouses, they are living independently and demanding a higher quality of life. "People used to just live with the pain," says Dr. Pupparo. "Womens' higher expectations and willingness to seek out medical care, especially older women, have increased the demand for joint replacements.

By the same token, younger patients are also seeking out replacements at a higher rate. At Unity Hospital alone, the average knee replacement patient is between 63 and 64 – younger than the national average. "Women probably gain the most from joint replacements, largely because of their narrower knee," adds Dr. Lewish. "Our goal and theirs is to restore their lives to where they were and relieve chronic pain."

Recovery time is also notable in success rates. Previously, patients were hospitalized for up to two weeks after a joint replacement. "Now, people are out of bed right afterwards, and usually home in a few days." Dr. Pupparo also notes the more aggressive recovery plan. "We're moving away from narcotics like morphine, which can cause side effects like stomach upset and constipation, and leave patients too sedated to successfully perform PT." Instead, patients take a multi-modal pain man-

agement approach – using a combination of local anesthesia and nerve blocks. "The first night post-surgery, patients are smiling."

Dr. Lewish agrees that the post-surgical care is critical. "Joint replacement programs like ours at Unity have helped to standardize the approach – from equipment used to physician, nursing and staff care and PT." He recently performed bilateral knee replacements on a 60-year-old patient's knees. "He walked out of here on his own in just three days."

Opportunities with Hip Replacements

Hip replacements have also become more successful. "Because the female pelvis is aligned differently than a man's, women face similar hip issues as with knees," says Dr. Lewish. Fortunately, design has caught up with demand. Patients can now choose a "bearing surface" based on durability, performance level, wear resistance, and personal need. The most common is a metal femoral head (ball) made of either stainless steel, cast or wrought cobalt, a metal-base alloy against a polyethylene (plastic)-lined acetabular cup. This option provides durability, versatility, non-toxicity, and adequate toughness for most lifestyles.

Ceramic bearings are designed with either a polyethylene or ceramic liner, which reduce wear and offer improved lubrication and reduced friction. "The metal ball technique is still considered satisfactory for older patients, but for younger patients, we use ceramic techniques."

Dr. Pupparo also sees big improvements in technology and design, using less cement and more bone-in growth technology. "The fixation is far more reliable now, with many sizes to choose from to fit the patient more precisely," he says. "Ultimately, the joints are just more comfortable with less risk of dislocation. It's a better procedure for quality of life and pain relief. The computer-assisted technology and instruments help place the implants more accurately and function better, contributing to a far more normal feel of the joint."

He also notes the improvements in hip replacement recovery. We hold educational sessions for our patients so they gain a greater knowledge of what they'll experience to help alleviate any fears. "Now, patients are walking the day of surgery, with less blood clots and infection risk." A greater number are going home than ever before, no longer requiring transition to a nursing home or rehab facility, which is critical to reducing infections.

"From a joint replacement standpoint," adds Dr. Pupparo, "it's becoming a very high demand/volume procedure. There's no better procedure with better short-term results. We're as grateful as our patients every day when we see how quickly they regain their quality of life."

Post-Surgery Rehab

Sharon Osborne, Director of Rehabilitation Services at St. Ann's Community, confirms this trend toward improved recovery for patients 65 and younger. "We're seeing the younger seniors undergoing outpatient rather than transitional care. Patients used to just live with the pain for years. Now they are pre-planning their surgeries."

For those older patients who do require transition to rehab before being safely discharged to home, the approach to recovery is comprehensive. "Our elderly patients average 80 years of age, and can't go straight home after a knee or hip replacement. That's why having a thorough transitional care plan is so important." Care is multi-factorial – most patients have osteoarthritis and co-morbidities which clearly govern when they can go home. Ensuring these patients won't require rehospitalization means the care plan is very personalized, with the average length of stay 14-16 days. Working with the team of doctors, nurses, PTs, OTs, social workers and nutritionists, patients' goals for their future living situation are mapped out.

The therapy team works on independence, taking into account all factors of surgery -- from getting up and out of bed, to dressing and bathing post-op. "We consider everything from walking on uneven surfaces, to opening a door or gate, using a walker -- even how to carry a cup of coffee to the kitchen table."

Osborne notes that the surgery itself is not the biggest hurdle – it's the patient's overall health and well-being. "Patients are often in a frailer state, coping with diabetes, high blood pressure or obesity, which makes it harder to recover. We want to ensure that at discharge, each patient is participating in what's happening, making informed decisions to successfully manage their health long-term." Additional services, from Meals on Wheels to visiting nurse services, special adaptive equipment and ramp rails are all considerations once they return home.

She's encouraged by the more varied options for joint implants – being gender specific and lasting longer – but is most concerned about the overall co-morbidity issues and the expected increased volume of elderly patients moving forward. For her and these busy surgeons, being prepared to meet these growing demands is critical.

While fewer patients are requiring extensive rehab after surgery, early prevention is still key to avoiding the need for surgery in the first place. "We encourage all our partnering physicians to continue promoting conservative activity for the joints, moderate exercise, anti-inflammatories, and using assistive devices if needed. "If patients can help manage their weight, using elliptical machines, switching from high impact to lower impact activity," joint degeneration will lessen," says Dr. Pupparo. "Otherwise, our concern is there won't be enough orthopedic surgeons to cover the demand."

High Quality Mammography in Women with Breast Implants

Wade Hedegard, MD
Elizabeth Wende Breast Care LLC

Breast augmentation is a common cosmetic procedure, both in the United States and worldwide. It is estimated that more than 1% of the adult female population in the United States (between 1 and 2 million) has undergone breast augmentation. Although silicone and saline implants are the most common forms of augmentation encountered with imaging, there is tremendous variation in surgical techniques and materials used. Use of silicone implants for breast augmentation began around 1963 and were common practice for almost thirty years until banned in 1992 by the U.S. Food and Drug Administration because of a possible association with connective tissue diseases. The ban was subsequently reversed in 2005. Saline implants were initially utilized in 1962, however did not gain widespread use until 1992.

Aside from use as an elective cosmetic procedure, breast reconstruction with implant placement has been increasingly undertaken following mastectomy for breast carcinoma or prophylactic mastectomy for women at high risk of developing malignant breast disease.

Women with breast implants should follow the same American Cancer Society (ACS) regimen of yearly mammographic screening starting at age 40 as women without breast implants. The screening mammogram should include standard bilateral craniocaudal (CC) and mediolateral oblique (MLO) views. However, due to the presence of the implant, several special mammography views should be taken to allow visualization of both the breast tissue and the implant. Implants are typically a single lumen composed of an envelope which contains either silicone or saline. Implants can be placed in a sub-glandular or sub-pectoral position. Once placed into the body, a thick fibrous capsule generally forms around the implant.

Mammographic imaging cannot penetrate silicone or saline implants well enough to image the overlying or underlying breast tissue. Therefore, some breast tissue will be hidden by the implant and not seen on the mammogram. In order to visualize as much breast tissue as possible, women with implants undergo four additional views. When obtaining these additional images, known as Eklund views or implant displacement (ID) views, the implant is pushed back against the chest wall and the breast is pulled forward, displacing the implant from view and allowing for imaging the breast tissue only.

On mammography, silicone implants appear as a very dense oval mass which obscures underlying glandular breast tissue. Because of the extreme density of the silicone, a discernable envelope or any of its accompanying folds are not visualized. Saline implants appear as oval masses with a dense peripheral envelope and a more lucent center which permits visualization of some underlying glandular tissue. Surgical positioning of implants can significantly affect the interpretation of mammograms. A sub-glandular position gives the surgeon better control of breast shape, but much of the native breast tissue is obscured on mammography. Sub-pectoral positioning allows for improved visualization of the breast tissue on mammography.

The most common indication for dedicated imaging of silicone implants is to detect possible rupture. Rupture of silicone implants is described in relation to the fibrous capsule which forms around the implant. An intracapsular rupture consists of a breach of the silicone polymer capsule, however the silicone remains within the fibrous capsule. This may be compounded by an extracapsular rupture, where silicone also leaks outside the fibrous capsule to lie free within the breast tissue. Extracapsular silicone may be absorbed by nearby axillary or intra-mammary lymph nodes. As with any patient undergoing imaging, obtaining accurate history and physical examination is of utmost importance. Women have often had replacement of silicone implants in the past, and residual silicone within the breast tissue from a previous leak can lead to confusion for the radiologist if not made aware of this. Mammography is of little value in assessing the integrity of implants for the reasons discussed previously, although it may be useful for assessing surrounding breast tissue. Breast ultrasound can be useful in the assessment of possible ruptured implants, however, MRI is the most reliable imaging method and is considered the gold standard for evaluation of silicone implant integrity. In comparison, MRI does not have a role in evaluating saline implant integrity because a ruptured saline implant presents clinically as an acute reduction in breast size, especially compared with the unaffected side.

It is important to provide high quality breast imaging to patients with breast implants. Imaging the augmented breast presents unique challenges based on the surgical procedure and materials used, thus it is important that the technologist and radiologists have experience and expertise with imaging breast implants.

Bariatric Surgery Offers Long Term Health Benefits to a Growing Number of Women

By Elizabeth J Hughes, FNP

It's no secret that a balanced diet and adequate exercise are vital to maintaining a healthy body weight. But, what if a patient finds themselves 100 lbs overweight, has tried numerous weight loss plans and achieved only minimal success? Often patients are battling their weight and obesity-related comorbidities such as type II diabetes, hypertension and cardiovascular disease. When traditional methods fail, health care providers and their patients may turn to bariatric surgery. The surgery is overall considered very safe. In fact, mortality and complication rates are lower than those typically associated with gallbladder or hip replacement surgery. According to the American Society for Metabolic and Bariatric Surgery, almost 180,000 Americans underwent bariatric surgery in 2013.

Common Bariatric Surgeries

While there are a number of different bariatric surgery procedures for patients to close from, the Roux-en-Y Gastric Bypass (RYGB) remains the gold standard of bariatric surgery. This procedure results in the highest percentage of weight lost, by restricting food intake and inducing nutrient malabsorption. Surgeons create a small proximal gastric pouch that bypasses the remainder of the stomach, the duodenum and a small portion of the jejunum. The vertical sleeve gastrectomy (VSG) is a procedure that is gaining in popularity. In this procedure, surgeons remove 80% of the stomach creating a "sleeve" shape and restricting food intake with minimal nutrient malabsorption. It also reduces the amount of ghrelin produced in the body which may decrease a patient's desire to eat. The Adjustable Gastric Band (AGB) is a small bracelet-like device with an inflatable balloon that creates a small gastric pouch and restricts the speed at which food can pass into the rest of the stomach, increasing satiety.

When is Bariatric Surgery Appropriate?

Surgical treatment of obesity is indicated for patients with a BMI of 40 or more or a BMI of 35 or more with one or more obesity-related comorbidities such as type 2 diabetes, obstructive sleep apnea, hypertension or dyslipidemia. The goal of the surgery is to induce a weight loss of 50% or more of a patient's excess body weight and to reduce obesity-related co-morbidities to an acceptable level. The rate of weight loss, which varies by individual, ranges from 5 to15 lbs per week for the first three months. Typically, patients continue to lose weight for 12-18 months post operatively. A patient's perception of "successful weight loss" may vary from this medical definition, however. Often the weight loss that occurs within the first few months after surgery is enough to greatly improve a patients physical functioning and quality of life. The vast majority of patients will keep their excess weight off long term. On average, less than 10 percent of patients regain their lost weight due to an inability to maintain new diet and exercise behaviors and a relapse back into old habits such as grazing and eating calorie dense high fat and high sugar foods.

More Women Undergoing Bariatric Surgery

According to the National Institute of Health, the prevalence of obesity in women is equal to that of men, with about 35% of US citizens considered obese. However, women are twice as likely to suffer from extreme obesity, or a BMI of 40 or greater. This may explain why 85% of bariatric surgery patients are women. And, half of all patients undergoing bariatric surgery are women of reproductive age. While the weight loss resulting from bariatric surgery often resolves or improves type 2 diabetes, hyperlipidemia, hypertension and sleep apnea, it also provides benefits unique to female patients.

Decrease in Cancer Risk

Obesity is a known risk factor for cancer. Interestingly the benefit of weight loss on incidence of cancer is greater in women. A study published this year indicated that the risk of endometrial cancer is reduced by 71% in severely obese women after successful bariatric surgery. That reduction increases to 81% if a normal weight is maintained long term.

Pregnancy and Fertility

Though not considered a treatment for infertility, surgically induced weight loss can increase fertility. Women with polycystic

Bariatric surgery has changed my life. It took me a long time to realize I needed help. I had been overweight almost my entire life, but did not realize how my weight was impeding my ability to live. Truth be told, I did not realize how big I had gotten despite the pictures, videos, and large clothes! When I look in the mirror now I see the person, I always thought I was. I feel more confident and it reflects in my interactions with others.

~Sheila B.

ovarian syndrome (PCOS) often experience a normalization of hormones and menstrual cycles following bariatric surgery and are less likely to experience pregnancy complications associated with obesity such as cesarean section, gestational diabetes and preeclampsia. The American Congress of Obstetricians and Gynecologists recommends that women avoid pregnancy for at least 18 months following bariatric surgery to allow time for sufficient weight loss and stabilization of weight.

Body Contouring Surgery

Skin laxity is a common complaint of bariatric surgery patients who have experienced massive weight loss. Though typically not covered by health insurance, 20% of patients will undergo body contouring surgery to deal with excess skin most commonly on the abdomen, upper arms and thighs. Experts recommend that patients wait until weight has stabilized, or 12-18 months after surgery.

With the rate of obesity remaining high, more patients and their health care providers will be exploring bariatric surgery as an option to improve quality of life and reduce the risk and complications of long term chronic diseases.

Elizabeth Hughes is a Family Nurse Practitioner for the Highland Hospital Bariatric and General Surgery outpatient clinic. She received her bachelors and masters degrees from the University of Rochester School of Nursing and is currently a Doctoral student at St. John Fisher College Wegman's School of Nursing.

MEANINGFUL USE

STAGE 2 COMPLICATIONS AND CHALLENGES

Question: I heard reports that many hospitals and physicians have not met Stage 2 of Meaningful Use. Is there any speculation that CMS will extend the time to attest?

Answer: No. Eligible physicians should make plans for early attestation and should prepare as far as possible in advance for Stage 2 attestation. CMS recently released data indicating that only 4 hospitals and approximately 50 eligible physicians have achieved Stage 2 Meaningful Use. Hospitals only have 5 months left in the reporting period to attest to and qualify for Stage 2. Eligible physicians, while they do have a bit more time left in their reporting period (8 months) should take an important lesson from the drastically low number of hospitals able to achieve Stage 2. It is highly unlikely that CMS will allow any additional time for attestation, and failure to achieve Stage 2 Meaningful Use will not only result in loss of any potential incentive payment but it will also result in a reduction for all Medicare reimbursements going forward. Eligible physicians are encouraged not to wait until the last quarter of the year to attest, as your EHR company will likely be overwhelmed at this time and may not be able to provide the extent of assistance necessary for successful attestation if all eligible physicians put attestation off until the last possible moment.

If you have any questions, please contact our Managing Partner, Michael J. Schoppmann, Esq at 1-800-445-0954 or via email at MSchoppmann@DrLaw.com.

Gene Discovery Links Cancer Cell 'Recycling' System to Potential New Therapy

URMC Press

University of Rochester scientists have discovered a gene with a critical link to pancreatic cancer, and further investigation in mice shows that by blocking the gene's most important function, researchers can slow the disease and extend survival.

Published online by Cell Reports, the finding offers a potential new route to intrude on a cancer that usually strikes quickly, has been stubbornly resistant to targeted therapies, and has a low survival rate. Most recent improvements in the treatment of pancreatic cancer, in fact, are the result of using different combinations of older chemotherapy drugs.

The research led by Hartmut "Hucky" Land, PhD, and Aram F. Hezel, MD, of UR Medicine's James P. Wilmot Cancer Center, identifies a new target in the process of garbage recycling that occurs within the cancer cell called autophagy, which is critical to pancreatic cancer progression and growth.

Autophagy is derived from the Greek roots "auto" (self) and "phagein" (to eat), and is an intracellular digestive process that allows cells to survive under stress. During a cell's transformation from normal to malignant, autophagy speeds up to keep pace with rapid cellular changes and a tumor's quest to grow. The newly discovered PLAC-8 gene sustains the highly active recycling process, as it removes faulty proteins and organelles and degrades them into reusable building blocks during cancer progression.

"What makes this an exciting opportunity is that the gene we're studying is critical to the cancer cell's machinery but it is not essential to the function of normal cells," said Land, chair of Biomedical Genetics at the University of Rochester School of Medicine and Dentistry and director of research at Wilmot. "By targeting these types of non-mutated genes that are highly specific to cancer, we are looking for more effective ways to intervene."

The Cell Reports study underlines Wilmot's overall unique approach to cancer research. Rather than investigate single faulty genes linked to single subtypes of cancer, Rochester scientists have identified a larger network of approximately 100 non-mutated genes that cooperate and control the shared activities of many cancers. While investigating this larger gene network, Land and Hezel focused on PLAC-8.

Moreover, the team found that by inactivating PLAC-8 in mice and shutting down autophagy, they could significantly slow cancer's progression. The relevance of PLAC-8 may also extend to other tumors – lung, colon, and liver, for example -- that share key genetic changes such as KRAS and p53 mutations that are present in the majority of pancreatic cancers. The breadth of these findings is an area of ongoing study in the Land and Hezel labs.

"PLAC-8 and its job within the cancer cell of accelerating recycling suggests new points of attack and what we all hope will be opportunities to identify and develop new treatments," said Hezel, vice chief of Wilmot's Division of Hematology and Oncology and a UR associate professor. "Our data showing PLAC 8's role in autophagy has great potential because while there are other drugs being evaluated to inhibit autophagy, not all of them target proteins specifically important to this process in tumors."

The role of autophagy in cancer is gaining attention. Clinical testing of new therapies is taking place at the same time that a new basic understanding of this process and how it functions in pancreatic cancer is emerging.

Model Sheds New Light on Sports-related Brain Injuries

URMC Press

A new study has provided insight into the behavioral damage caused by repeated blows to the head. The research provides a foundation for scientists to better understand and potentially develop new ways to detect and prevent the repetitive sports injuries that can lead to the condition known as chronic traumatic encephalopathy (CTE).

The research – which appears online this week in the Journal of Neurotrauma – shows that mice with mild, repetitive traumatic brain injury (TBI) develop many of the same behavioral problems, such as difficultly sleeping, memory problems, depression, judgment and risk-taking issues, that have been associated with the condition in humans.

One of the barriers to potential treatments for TBI and CTE is that no model of the disease exists. Animal equivalents of human diseases are a critical early-stage tool in the scientific process of understanding a condition, developing new ways to diagnose it, and evaluating experimental therapies.

"This new model captures both the clinical aspects of repetitive mild TBI and CTE," said Anthony L. Petraglia, MD, a neurosurgeon with the University of Rochester School of Medicine and Dentistry and lead author of the study. "While public awareness of the long-term health risk of blows to the head is growing rapidly, our ability to scientifically study the fundamental neurological impact of mild brain injuries has lagged."

There has been a great deal of discussion in recent years regarding concussions as a result of blows to the head in sports. An estimated 3.8 million sports-related concussions occur every year. Mild traumatic brain injury is also becoming more common in military personnel deployed in combat zones. Over time, the frequency and degree of these injuries can lead short and long-term neurological impairment and, in extreme examples, to CTE, a form of degenerative brain disease.

The experiments described in the study were designed in a manner that simulates the type of mild TBI that may occur in sports or other blows to the head. The researchers evaluated the mice's performance in a series of tasks designed to measure behavior. These included tests to measure spatial and learning memory, anxiety and risk-taking behavior, the presence of depression-like behavior, sleep disturbances, and the electrical activity of their brain. The mice with repetitive mild TBI did poorly in every test and this poor performance persisted over time.

"These results resemble the spectrum of neuro-behavioral problems that have been reported and observed in individuals who have sustained multiple mild TBI and those who were subsequently diagnosed with CTE, including behaviors such as poor judgment, risk taking, and depression," said Petraglia.

Petraglia and his colleagues also used the model to examine the damage that was occurring in the brains of the mice over time. The results, which will be published in a forthcoming paper, provide insight on the interaction between the brains repair mechanisms – in the forms of astrocytes and microglia – and the protein tau, which can have a toxic effect when triggered by mild traumatic brain injury.

"Undoubtedly further work is needed," said Petraglia. "However, this study serves as a good starting point and it is hoped that with continued investigation this novel model will allow for a controlled, mechanistic analysis of repetitive mild TBI and CTE in the future, because it is the first to encapsulate the spectrum of this human phenomenon."

Running Toward a Solution for Knee Pain

By Emilie Rowe, DPT

Running is a sport of passion; why else would we subject our bodies to countless miles of punishment on a day-to-day basis? Ideally, every step of every mile would be pain-free, but in reality many runners experience some form of injury during training. Contributing factors can include overuse, muscular dysfunction, and biomechanical problems. One of the most common running-related injuries is Patellofemoral Syndrome, also known as Runner's Knee, which can result from pathophysiological factors both extrinsic (overtraining, poor equipment, environmental conditions) and intrinsic (lower extremity alignment, muscle imbalance). Although this syndrome is prevalent in both male and female runner's, women are more likely to develop patellofemoral pain, due to their differences in orientation and lower extremity alignment.

Runner's Knee is characterized by anterior knee pain surrounding the kneecap, caused from improper tracking of the patella in the femoral grooves during active knee range of motion. In a healthy knee, the patella moves in a sinuous motion, moving inferiorly to superiorly, while also tilting and rotating slightly so that the entire surface articulates with the femoral trochlea. The patella is stabilized within the femoral grooves by proper muscle balance and lower extremity alignment. This specific design results in a smooth translation of the patella during active knee extension and flexion. In a runner with patellofemoral pain, abnormal tracking of the knee cap results in thinning of the articular cartilage under the patella, synovial irritation, inflammation, and pain.

Women naturally have a broader pelvis than men, needed specifically for childbirth. A woman's broader pelvis can cause the hip joint to move laterally away from the midline of the body, which can lead to increase frequency of malalignment issues of the lower extremity, such as genu valgum deformity, hip anteversion, and forefoot pronation. This in turn leads to an increased Quadriceps Angle or Q angle. This measuring tool, formed from the ASIS of the pelvis to the tibial tubercle, is used to assess the alignment of the lower extremity. Normal measurements range from 15 to 17 degrees in females. A Q angle greater than this creates a larger valgus vector, which increases the lateral pull of the patella and causes improper tracking inside the femoral grooves. The result is pain, caused by overloading of the patellofemoral joint.

Women can mitigate this predisposition toward lower extremity malalignment by incorporating cross training into their running routine, with a particular focus on lower extremity strengthening, specifically the hip abductors and vastus medial oblique. The increased Q angle associated with patellofemoral pain causes the femur to be placed in an adducted and slightly internally rotated position causing the hip abductors, specifically the gluteus medius to be in an elongated and weakened position. The gluteus medius is one of the gluteal muscles, originating at the ilium and inserting on the greater trochanter of the femur. Its role, along with the gluteus minimus, is to pull the thigh away from midline or "abduct" the femur. During running, the gluteus medius acts as the primary stabilizer of the hip and pelvis during stance phase, decreasing the adduction movement. Strengthening of the hip abductors, specifically the gluteus medius, can decrease the Q angle force of the patella in runners with patellofemoral pain.

Another muscle that plays a vital role in stabilization of the patella is the vastus medialis oblique or VMO. The VMO is one of four muscles that make up the quadriceps in the thigh, originating along the medial aspect of the femur and inserting into the medial retinaculum and patellar tendon. The VMO is important not only in contributing to knee extension (specifically terminal knee extension), but also in enhancing stability of the patella. Because of the VMO's oblique attachment to the patella, proper alignment of the knee cap is dependent on VMO control. Proper strengthening of the VMO creates a balance between medial and lateral muscles of the quadriceps during knee extension, preventing lateral patellar tracking.

Running is a popular form of exercise- proven to enhance ones mental as well as physical health-but injuries like Runner's Knee can sideline an athlete for weeks or longer. Female runner's are at an increased for developing patellofemoral pain due their differences in orientation and lower extremity alignment. With a well-rounded strengthening program, runner's can decrease their risk of injury and spend more time on the open road, doing what they love.

Emilie Rowe is a physical therapist with Rochester General Health System's Physical & Occupational Therapy Center at East Ridge Road.

Dr. Barry Goes to India

Transplant surgeon and organ donation advocate Dr. Chris Barry (http://www.livercancergenomics.com/blog) is headed off to India this August for a year-long sabbatical with MOHAN Foundation (http://www.mohanfoundation.org). The Multi Organ Harvesting Aid Network is based in Chennai (formerly Madras) and is India's largest and most effective transplant and organ donation awareness non-governmental agency. MOHAN engages in professional and lay-public education regarding deceased donor transplant. Dr. Barry's mission will be to help establish more deceased donor transplant programs throughout India, beginning in Rajasthan, a state which currently has no such program.

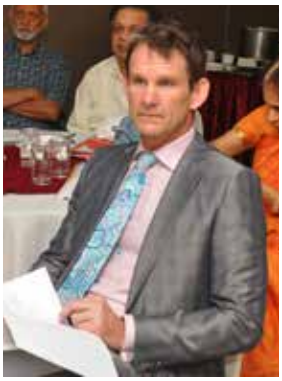
Dr. Chris Barry seen in the center attending a MOHAN Foundation conference in Chennai.

Dr. Barry has been involved in transplant and organ donation awareness his entire professional career, but in 2011, his devotion to this cause magnified with his founding of bLifeNY (https://www.facebook.com/pages/bLifeNY/224810204243031). Originally a grass-roots effort made up of students, transplant donors and recipients, and interested transplant professionals, bLifeNY is now an officially incorporated non-profit entity and is a recognized social media force both nationally and internationally. In 2012, Dr. Barry presented his TEDxFlourCity talk (https://www.youtube.com/watch?v=UigBNjBLByc) on organ donation that outlined the problem of the organ donor shortage and suggested creative solutions. His talk has influenced thousands to thoughtfully consider registering to become organ donors.

On a recent trip to India, Dr. Barry was intrigued by the nascent state of deceased donor transplantation in this rapidly developing country. Most transplants performed in India are from living donors, necessarily limiting this activity to kidney and liver transplants. Although deceased donor organ transplantation (i.e., using organs recovered from brain dead individuals) is becoming more accepted, the resources and infrastructure are lacking to make this practice widespread. In addition, transplantation has somewhat of a bad reputation in India because of widespread beliefs that transplant is a therapy for only the rich and it is a corrupt field plagued by a thriving illegal organ trade.

At one of his many invited lectures during his trip, Dr. Barry met with Dr. Sunil Shroff, a renowned transplant nephrologist in Chennai and the Founder and Executive Director of MOHAN Foundation. Dr. Barry learned about the substantial challenges facing organ donation acceptance in India, some of which are similar to challenges in the US and many of which are very different.

From a personnel perspective, many physicians are unfamiliar with brain death criteria and the management of brain dead patients prior to organ recovery. Also, few surgeons and support staff are trained to perform multi-organ recoveries. Finally, adequately trained transplant counselors who perform the critical interface between families and hospital staff are few in numbers.



From a logistical perspective, adequate funding for complex

transplant procedures and perioperative and postoperative care is lacking. Health insurance is practically nonexistent in India, so citizens either pay for health care out of pocket or they go to government-run hospitals for free care (the latter of which are often understandably overburdened and underperforming). As a result, private transplant hospitals tend to remain content with their living donor activity and public hospitals tend to eschew the monumental challenges of deceased donor transplant. So there are very few hospitals where organ recovery from brain dead patients can actually take place. Also since there are no robust public-private partnerships devoted to transplantation, access remains highly selective and there is no national infrastructure for organ donor sharing and transplant data storage.

Finally, from a social perspective, there are cultural barriers to the acceptance of brain death and organ donation, but there is substantial evidence that these barriers are surmountable with appropriate educational interventions. Health care workers can be educated and sensitized to organ donation issues. Skilled counselors can be trained to interact with family members, hospital staff, and transplant professionals. Public education campaigns can effectively address concerns about donation and emphasize the inherent goodness of saving lives through transplant. The suspicions and dispersions surrounding transplant as a field will be more difficult to address and will require significant financial commitments from the health care industry, the private sector, and the Indian Government. However, if a robust and transparent system for organ sharing and transplant data repository is established in India (similar to the United Network of Organ Sharing here in the US), then the increased deceased donor transplant activity will allow for greater access to transplant for all members of Indian society and will decrease the demand for an illegal organ trade.

David Omdahl and Dr. Barry with Bollywood superstar Priyanka Chopra.

"I have more to learn from this than I will be able to give, but I look forward to this incredible opportunity with all my heart" says Dr. Barry. Indeed, his mission will be challenging but hopefully full of anticipated (and unanticipated) outcomes. To support Dr. Barry's sabbatical, please visit http://www.gofundme.com/8g5pwo.

Common Foot Problems

Q&A with Dr. Joseph L. Carbone

Joseph L. Carbone, DPM, FACFAOM

Q. How has the specialty of podiatry evolved over the past five years?

A. The practice of podiatry involves the diagnosis and medical/surgical treatment of the foot and in some states the ankle. More recently state laws have changed allowing podiatrists to treat more complex pathology. In NYS, legislation was recently passed allowing a podiatrist with specialized training to treat soft tissue and bony pathology in the ankle and lower leg.

Q. What are some of the more common foot problems in women?

A. Many structural foot problems are not specific to women however foot problems in women are exacerbated due to high fashion foot apparel. Some of the more structural deformities are bunions of the large toe joint, bunionettes on the small toe joint and hammer toe deformities. Most of these bony deformities can be tolerated with alternate shoe gear and accommodative padding. When palliative care fails and these deformities are painful and affecting ones ambulation, surgical correction is a consideration. It's important for the patient to understand that foot surgery, in most cases, should only be considered when pain is the chief complaint and intolerable. I don't agree with asymptomatic or cosmetic foot surgery. Due to the complexity and the dynamics of foot structure unnecessary procedures could result in pain.

Q. Where should a patient go when experiencing foot problems?

A. The majority of foot pathology is treated by podiatrists. There are specially trained orthopaedic surgeons who also treat the feet. They more commonly treat major structural deformities of the rear foot and acute trauma. Some podiatrists have special training and can also address these more complex issues.

Q. What are some recent advances in foot surgery?

A. More and more surgeries are performed minimally invasive – reducing the recovery time for the patient and reducing post-operative pain. While there are many specially trained podiatrists performing minimally invasive surgeries, it's important for referring physicians and patients to understand the benefits to this approach and to seek out qualified doctors experienced in minimally invasive surgery.

Q. About Orthotics – what are the main differences between over-the-counter arch support and bio-mechanical foot orthotics?

A. Often time, patients are happy to learn that their insurance policies reimburse for functional orthotics provided a licensed practitioner confirms an appropriate diagnosis and writes the proper RX. While many shoe stores and foot apothecary's dispense same-day orthotics, they are not covered services as per durable medical goods guidelines. It's important to understand that a true tri-plane corrective foot orthotic has to be custom made from a patient's foot impression to properly compensate and correct alignment deformities in the foot.

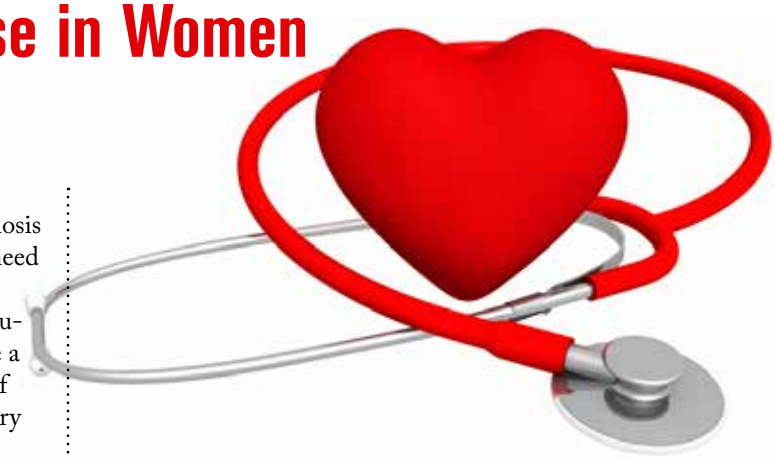
Q. What are some of the common foot problems treated with orthotics?

A. Two of the most common are arch pain and plantar fasciitis. The orthotic supports the arch area and disperses abnormal pressure off the course of the plantar fascia. A true functional orthotic can also prevent the progression of many structural deformities like bunions by controlling the abnormal motion in the rear foot and hypermobility of the first ray therefore reducing abnormal pressure at the bunion joint.

Q. You are unique among your peers as not many doctors pursue political office. How did you venture down that path?

A. I was fortunate enough to be the only elected official in Irondequoit to represent the Republican Party. I was elected to the Monroe County Legislature in 2012 and recently elected by my peers to serve as Assistant Majority Leader of the Monroe County Legislature. As a legislator, I also have the honor of representing the legislature on the Board of Directors of Monroe Community Hospital. It's really not too far off – I've been caring for our communities' patients for 30 years and have been an owner of a private practice in Irondequoit and Brighton for 25 years– my political endeavors only expand the scope of my service and dedication to our community.

UR Medicine Cardiologists Pen Manual on Cardiovascular Disease in Women



UR MEDICINE CARDIOLOGISTS HAVE PUBLISHED A comprehensive manual for physicians to improve the diagnosis and treatment of women with heart disease, because they need different care than men.

Hanna Z. Mieszczanska, MD, director of UR Medicine's Women's Heart Program.

"Management of Cardiovascular Disease in Women" will be a valued resource for a variety of practitioners, including primary care physicians, internists and obstetrician/gynecologists, who provide care for millions of women who face cardiovascular disease (CVD), the leading cause of death for women.

Hanna Z. Mieszczanska, MD, director of the Women's Heart Program, and former colleague Gladys P. Velarde, MD, who is now at University of Florida, led the two-year effort to produce the guidebook. The Women Heart Program, an integral part of the UR Medicine Heart and Vascular, provides specialized preventive care and the latest treatments for heart disease.

"For years, women have been treated like men because there was a lack of gender-specific information available and under-representation of women in research studies of CVD," said Mieszczanska, associate professor of Cardiology at the University of Rochester School of Medicine and Dentistry.

Women are physiologically and psychologically different from men and clinicians need greater understanding of the variations in symptoms of CVD, test results and morbidity and mortality between the genders.

The book outlines current knowledge of heart disease in women, including the challenges and limitations of available research. It covers unique aspects to women's heart health, such as pregnancy, impact of stress and other psychosocial issues, as well as hypertension, coronary artery disease, congestive heart failure and diabetes.

Many times women dismiss and minimize their heart disease symptoms because their responsibilities to their family and career are too difficult to ignore, Mieszczanska said.

"Women are traditionally caregivers, but as our roles in the household have expanded into the workplace, women tend to forget to take care of themselves. As a result, they suffer silently with disease or are surprised by a significant health crisis that may have been avoided with preventive care," she said.

What is My Liability?

Medical Record Documentation

James E. Szalados, MD, MBA, Esq.

Issue

Telemedicine represents an evolving healthcare delivery model which leverages the inherent capabilities of electronic medical records, image digitalization, internet-based videoconferencing, and voice-over internet protocols to extend medical care to geographically separate patients and providers. Telemedicine is more than a telephone conversation or email or instant messaging; telemedicine requires a comprehensive evaluation of a patient using real-time technology, and the delivery of medical care as an evaluation and management service directed to a particular patient's condition. The promise of telemedicine is to extend the reach of specialized medical expertise into areas in which there is a health provider shortage or a shortage of either specialists or subspecialists. To a large extent, because telemedicine remains an evolving technology, the technology is gradually forcing its own legislative regulation and legal oversight. Although there are no legal prohibitions to using technology to assist in the practice of medicine; however the adoption of any new technology in the practice of medicine typically uncovers hidden potential for liability.

New York State law defines "telemedicine" as 'the delivery of clinical health care services by means of real time two-way electronic audio-visual communications which facilitate the assessment, diagnosis, consultation, treatment, education, care management and self-management of a patient's health care while such patient is at the originating site and the health care provider is at a distant site.' The NY Governor's Medicaid Redesign Team subsequently authorized Medicaid reimbursement for medically necessary physician specialist consultations provided via telemedicine to patients in emergency rooms, hospital outpatient departments and hospital inpatient settings.

Liability related to telemedicine is similar to liability in medical practice; however, telemedicine is more complex because the care is provided to a patient located elsewhere, via electronic communication, and the telemedicine provider cannot make direct physical contact with the patient. There is little or no case law specific to telemedicine. In addition to medical malpractice, there are five important areas of legal risk (5 C's) associated with telemedicine: (1) credentialing; (2) contract; (3) consent to treat; (4) continuity of care; and (5) compliance (HIPAA, Anti-Kickback, and False Claims).

Malpractice Liability and Heightened Standards of Care: Medical malpractice is broadly defined as a deviation from accepted standards of practice which causes injury or death to a patient to whom the provider owes a duty of care. Providers do not owe a duty to a patient unless a provider-patient relationship has been established. State-specific medical malpractice case law, tort law and civil procedure govern potential telemedicine malpractice. Case law relating to more traditional aspects of medical care, such as telephone consultations and curbside consultations, have been extrapolated to telemedicine. A provider-patient relationship may exist even if the physician and patient have never been in direct contact, where providers or institutions have contracted with a telemedicine provider on the patient's behalf, even if the consent to treat is implied.

Telemedicine usually involves multiple providers and the question of which provider has constructive control over the care of the patient and liability for negligence in such care is not usually clear; in such cases joint and several liability principles will apply. The same dilemma may apply in the determination of the applicable standard of care, where selecting the appropriate community and the appropriate provider peer group may be complicated where the receiving hospitals are rural, there are varying provider mixes, and expertise is subject to technological limitations.

Some states have legislated heightened standards of care applicable specifically to telemedicine encounters. Heightened standards of care may also stem from Guidelines published

by societies and organizations, such as Society of American Gastrointestinal and Endoscopic Surgeons' Guidelines for the Surgical Practice of Telemedicine or the American Academy of Dermatology Association's Position Statement on Telemedicine. Furthermore, peer review protections may not extend to information shared between hospitals, therefore in order for providers to be protected under peer-review statutes. In addition, professional liability policies may not adequately cover exposures specific to telemedicine.

Paradoxically, as the adoption of telemedicine becomes increasingly accepted, physicians may become liable for not utilizing available telemedicine technologies, as a failure to appropriately consult, in the care of complex patients.

Credentialing Liability: Hospitals have a legal duty to responsibly select their medical staff. Provider of medical care within an institution must be appropriately credentialed within that institution. Providers must also be licensed in the state in which they provide services – the place where the patient is located; and the unlicensed practice of medicine constitutes a felony. With respect to individual providers, liability for credentialing is minimal as long as the credentials are accurately reported without misrepresentation. Non-physicians participating in telemedicine services must practice within the scope of their certification or licensure. Lawsuits against hospitals related to credentialing via the legal doctrine of "negligent credentialing" could, in the case of telemedicine, spread liability across institutions. There is an implied specificity with respect to the provider pool such that the hospital receiving telemedicine services be on notice regarding each provider providing telemedicine services.

In the instance that a non-credentialed provider provides patient care without due credentialing, there is significant potential liability to the institution receiving the services. Within NY State, each Article 28 facility, such as a hospital, is responsible for primary source verification of the credentials of each of its providers. However, NY Public Health Law §2805-u provides an exception such that the hospital receiving telemedicine consultations may, with specific caveats, reasonably rely on the credentialing and privileging decisions made by the providing hospital with respect to granting or renewing privileges to telehealth providers. Nonetheless, the Commissioner of Health has interpreted the law such that, contractual credentialing arrangements aside, the 'governing body of the hospital remains solely responsible for making final decisions regarding the granting of medical staff membership and professional privileges. Credentialing is also mandated by CMS through its Medicare Conditions of Participation (CoPs), (42 C.F.R. § 482.12 and § 482.22). In a 2004 opinion letter, CMS did not endorse credentialing of telemedicine providers by proxy but subsequently eased its requirements in 2011. Medicare CoPs require that the hospital receiving the telemedicine services review the services provided, provide written feedback to providing entity, and review adverse events and patient complaints arising from the telemedicine services. The Joint Commission (TJC) and the National Committee for Quality Assurance (NCQA) require 'thorough and deliberate verification of licensure and credentials for each provider within a healthcare institution.' TJC has specific credentialing standards for telemedicine (MS.13.01 and MS.06.01.03).

Contract: Contracts are legally binding agreements which define obligations and allocate risk. Contracts for services, such as telemedicine consultation services, will typically define the term, scope, and nature of the services to be provided, indemnifications, and compensation. Although individual providers may not each sign the institutional or corporate contract for services, they nonetheless may incur liability for failing to duly perform. Contracts should clearly delineate, for example, duties to monitor, duties to inform, duties to supervise, teaching obligations, prescriptive obligations, hours of coverage, malpractice coverage, and responsibility for procedural interventions. Contracts should also address responsibility for ensuring the reliability of the technology, back-up systems, as well as third-party and vendor obligations. The liability for ensuring adequate training should also be contractually defined since it has implications with respect to credentialing, standard of care, and contractual liability. Institutions and providers may share liability for lack of training or improper use of telemedicine technology.

Consent: Consent to treat is typically obtained at the point of care and is most often institution-specific. Patients must be aware of and consent to the potential benefits and risks associated with telemedicine such as delays which may from failures of telecommunications equipment, shared patient data, the limitations of technology, and the potential for security breaches. Informed consent for treatment should be documented in the record in accordance with a contractually specified protocol.

Continuity of Care: Physicians may liable for patient abandonment if there is a breach in continuity of care without reasonable notice or without provisions for adequate alternative coverage. The provider with the primary responsibility for managing a particular patient should be clearly defined; management by telemedicine should not be confused with telemedicine consultations. Failure to follow-up, failure to provide ongoing monitoring, failure to provide suitable call coverage, or misunderstanding regarding the roles of the various treating providers could result in an unintentional patient abandonment action wherein each provider assumed the other was responsible for the ongoing care of the patient. Therefore, tele-

medicine contracts should establish policies and procedures to ensure ongoing care, specific responsibilities, and appropriate transfers of care.

Compliance: Compliance with legal and regulatory mandates pertaining to the practice of medicine is complex and extensive. Telemedicine is particularly affected by the rules of HIPAA and HITECH governing the protection of personally-identifiable health information as it is stored and transmitted in electronic format. The False Claims Act (FCA) prohibits knowingly submitting or causing to be submitted false or fraudulent claims for payment to the government. In telemedicine the threshold meeting each elements of care required to justify reimbursement at a particular level of Evaluation and Management code is the same as that for an in-person clinical visit; however, the limitations of telemedicine may not allow for each element to be met. The most common telemedicine restriction with respect to federal, state, and private-payor reimbursement contracts is that medical encounters are not considered "medically necessary and appropriate" if the physician was not in face-to-face contact with the patient. Medicare has carved out a few exceptions to this general rule. Nonetheless, physicians must be sure that they submit claims appropriate to the level of the encounter. Under the Anti-Kickback Statute, it is a criminal offense to knowingly and willfully offer, pay, solicit, or receive any remuneration to induce referrals of items or services reimbursable by any federal health care program. Limited reimbursement by CMS for telemedicine services does not absolve anti-kickback liability if referrals beyond the telemedicine services might be involved.

In summary, telemedicine offers tremendous potential to offer increased access to complex and specialized medical care. Nonetheless, the state of the science, and the state of the legal and regulatory environment are not yet mature. Therefore, liability is inherent where the case law and the rules continue to evolve. Providers of telemedicine services should carefully review the inherent legal risks and proactively take measures to mitigate potential liability. Consultation with an experienced healthcare attorney is suggested.

Dr. Szalados is a licensed physician engaged in the practice of anesthesiology and critical care; a senior-level hospital administrator, and an attorney admitted to the practice of Law in New York and concentrates his practice in the areas of Health Law. Dr. Szalados is an attorney with healthcare law firm of Kern Augustine Conroy & Schoppmann, P.C.

AN UPDATE ON ICD-10

Laura B. Segave, MBA, MS,
Director of Health IT,
Innovative Solutions

The convergence of ICD-10, the Affordable Care Act, Accountable Care Organizations, payment reform, Meaningful Use Stage 1 and Stage 2 represented a "perfect storm" for medical practices, stretching resources beyond limits. With the delay of ICD-10 and extension of Meaningful Use Stage 2, you may be wondering what proactive actions you can take to stay ahead of the game.

Here are some recommendations for your consideration:

The delay of ICD-10 to October 2015 provides the opportunity for additional preparation:

- If you have not implemented an electronic health record system (EHR), now is the time to consider the many ways a structured reporting system will simplify your ICD-10 transition and mitigate revenue disruption. In order to intercept October 2015, you should explore potential EHR solutions by November 2014, commit to a new solution by January 2015, and implement the solution by July 2015.
- It's a great time to update your ICD-10 transition plan to ensure that you have the right resources in place to support the transition, identify an ICD-10 coordinator, understand the impacts to your practice, incorporate costs into your budget, mitigate cash flow impacts, confirm timing with external partners, update your documentation, complete your testing, optimize your systems and processes, and ensure your staff is trained.

The extra time for Meaningful use Stage 2 and delay of Stage 3 until 2017 can be leveraged by:

- Implementing and optimizing your 2014+ edition EHR. The extra time enables EHR vendors to get their software certified and rolled out to your practice. CMS has indicated a willingness to accept 2011 edition EHR technology for attestation in 2014.
- Implementing workflow adjustments required to collect required data and achieve clinical quality measures.
- Performing your annual risk analysis and develop a mitigation plan to reduce risks associated with protected health information and have your report available for attestation.
- In your planning, anticipate that Stage 2 start dates remain unchanged, such that organizations which attested to Meaningful Use Stage 1 during the first year, 2011, and the second year, 2012, are still expected to attest to Meaningful Use Stage 2 during 2014. Those attesting to Stage 1 in 2014 are still expected to attest to Stage 2 in 2015. The caution in option to do Stage 1 rather than Stage 2 in 2014 is that you still need to be ready on Jan. 1, 2015 to do Stage 2 for the entire year, because in 2015, the reporting period is an entire year rather than just one quarter. Be wary about slowing down full implementation of your EHR because you will have to be up and running on Jan. 1, 2015, to avoid incurring a penalty.
- The actual meaningful use delay is in the onset of Stage 3 moving into 2017. The Final Rule for Stage 3 is expected in the first half of 2015.

The great news in the delay of ICD-10 and Meaningful Use is that you have additional time to implement improvements to increase patient engagement, care, and satisfaction.

Advertiser Index

be a part of the Conversation

Editorial Calendar 2014

Vol 1: January/February
Cardiovascular Health & Wellness
Telemedicine: *Specialist Care*
Endocrinology

Vol 2: Men's Health
Orthopaedic Discussion: *Spines & Shoulders*
Diabetes
Gastroenterology
Infectious Disease

Vol 3: Women's Health
Orthopaedic Discussion: Hips & Knees
Top Issues in Women 's Health
Heart Disease & Stroke

Vol 4: Pediatrics
Concussion
Derma Disorders
Rural Health Specialist Care

Vol 5: Oncology
Palliative Care
Imaging Advances
Mental Health

Vol 6: Senior Medicine
Dementia & Alzheimer's
Orthopaedic Discussion: *Replacements & Rehab*
Stroke Treatment & Care

Special Columns

Practice Management • Accountable Care • Physician Recruitment
Product Spotlight • Financial Insight • Philanthropy • Medical Liability

To secure a spot in one of the 2014 issues and join the conversation – contact Andrea Sperry at (585) 721-5230 or WNYPhysician@gmail.com.

WHAT'S NEW

in Area Healthcare

URMC

Wilmot Cancer Institute Opens Comprehensive Breast Care Facility at Pluta

The Wilmot Cancer Institute announces the opening of UR Medicine's Comprehensive Breast Care at Pluta. The Henrietta facility will serve as the home for the renowned multidisciplinary breast cancer program that Wilmot has built in recent years, combined with Pluta's program and its history of compassionate and integrative care.

An array of services are available to patients, including radiation oncology, chemotherapy infusion, medical and surgical check-ups and consultations, an on-site lab for blood work, biopsies and minor procedures, social work services – as well as massage therapy, tai-chi classes, cooking demonstrations, and gentle yoga tailored for survivors. All patients will have access to clinical trials and tumor board consultations through the Wilmot Cancer Institute.

Some of these services are unique to upstate New York. In radiation oncology, for example, patients can receive treatment in the prone position, as opposed to the traditional supine position. Recent studies suggest the prone setup better shields the heart and lungs from inadvertent radiation toxicity.

"Putting the patient first is at the core of everything we do," said Patti Murray, RN, BSN, MS, associate director of clinical services at the Wilmot Cancer Institute, the umbrella organization for all of UR Medicine's cancer services including the Pluta location. "Our new comprehensive center is the best of Wilmot and the best of Pluta -- thriving under one roof."

Kristin Skinner, MD, UR Medicine breast cancer surgeon, associate professor, and director of the center, said the move to Pluta made perfect sense.

"We're very proud of our program at Wilmot, which has become a model for breast centers nationally," said Skinner, who joined the UR in 2006 after helping to build a similar breast program at New York University. "We've always tried to foster a holistic view, and that meshes very well with Pluta's philosophy. Moving in together, we can offer a better patient experience."

Rochester Dermatologist Elected to American Academy Board

UR Medicine dermatologist Marc Brown, MD, professor of Dermatology and Oncology at the University of Rochester Medical Center, was elected to the Board of Directors of the American Academy of Dermatology.

Brown joined the Department of Dermatology faculty in 1989, developing its Division of Dermatologic Surgery and Cutaneous Oncology. An expert in the Mohs technique to treat various forms of skin cancer, he performs about 2,000 cases annually and has completed more than 30,000 in his career. He also coordinates the Wilmot Cancer Institute Melanoma Group Practice.

After earning his medical degree at Georgetown University, Brown completed an internal medicine residency at the University of Rochester. He served two years in the Public Health Service followed by a dermatology residency at the University of Michigan. Board-certified in dermatology, he completed a two-year fellowship in Mohs Surgery and Cutaneous Oncology at the University of Michigan.

Brown also serves on the Board of Directors of the American Society of Dermatologic Surgery. He is immediate past president of the American College of Mohs Surgery and a past president of the International Transplant Skin Cancer Collaborative, Association of Academic Dermatologic Surgeons, and New York State Dermatologic Society.

A frequent national lecturer, Brown has published two books and 50 scientific articles, primarily relating to skin cancer.

The Flaum Eye Institute Welcomes David Shiple, MD to the Cornea/External Disease Service

Dr. Shiple completed his residency training at the University of Virginia and his cornea/external disease fellowship at the Flaum Eye Institute. He will be actively involved in patient care at our main campus facility and at our satellite offices.

The Flaum Eye Institute provides expert medical and surgical care across all the ophthalmology sub-specialties and is a major tertiary referral center serving Metropolitan Rochester, the Finger Lakes Region, Upstate New York and Northern Pennsylvania.

UNITY

Unity Health System Announces Appointment

Hemant Kalia, MD, MPH will join the Unity Neurosciences medical staff. He will be an attending physician at the Unity Spine Center at Ridgeway. Dr. Kalia provides services ranging from interventional spine care, specialized cancer pain rehabilitation, and treatment for complex pain syndromes like CRPS/RSD.

Dr. Kalia earned his Medical Degree from Mahatma Gandhi Memorial Medical College in Indore, India. He completed residencies in Preventative Medicine & Public Health, Physical Medicine & Rehabilitation and a fellowship in Pain Medicine from University of Rochester.