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News Briefs

Help for Undiagnosed Diseases

If you have patients with undiagnosed disease, a new clinical network may be able to help. Duke University is 1 of 6 United States (US) sites participating in the Undiagnosed Diseases Network established by the National Institutes of Health. Vandana Shashi, MD, and David Goldstein, PhD, are the principal investigators at Duke.

“We have been running a formal sequencing clinic for several years, which has taught us the importance of precisely evaluating each individual patient genome and considering them carefully in the context of specific clinical presentations,” says Goldstein, who directs the Duke Center for Human Genome Variation.

Patient procedures to identify genes not previously associated with a disease will occur at the Duke Clinical Research Unit. For more information, contact vandana.shashi@dm.duke.edu.

Alternative Treatment for COPD Bronchodilation

A clinical trial for patients with chronic obstructive pulmonary disease (COPD) is helping reduce lung-tissue volume and improve respiration for patients with advanced emphysema.

Coils are inserted through a bronchoscope into more-damaged lung units (typically in the upper lung) to shrink their volume and allow more space for healthier lung units (typically in the middle and lower lung). About 10 to 12 “PneumRx coils” are needed per lung to improve function. The nickel-titanium coils have been effectively used outside the US; some patients stop using external oxygen.

“We hope this approach can provide our patients with an effective and less-invasive option to improve quality of life,” says Momen Wahidi, MD, who directs Interventional Pulmonology and Bronchoscopy at Duke.

Call 800-MED-DUKE to refer a patient or to learn more about the clinical trial. [Image above shows a chest x-ray of a 76-year-old man with COPD and a history of smoking.]

Younger Patients Need Flu Vaccinations

Most patients who required intensive flu treatment at Duke University Hospital in 2013 were previously healthy young people (median age: 28.5 years) who had not received the flu vaccine. In an analysis of Duke’s first 22 patients who required the most-intensive care, only 2 had been vaccinated.

“Our observations reinforce a growing body of evidence that the influenza vaccine provides protection from severe illness,” says lead author Cameron Wolfe, MD, assistant professor of medicine at Duke. “The public health implications are important. Not only could a potentially deadly infection be avoided with an inexpensive shot, but costly hospitalizations could also be reduced.”
Six years ago, after having traveled to and from India several times in the course of volunteering and performing surgeries in charitable clinics, Selene G. Parekh, MD, MBA, an associate professor of orthopaedics at Duke, got an idea. “I thought, wouldn’t it be great if I could continue the educational process after I got home,” he says. “If I could find a way to live broadcast surgeries here in the US and then transmit them anywhere in the world—that would be a huge improvement.”

Parekh started experimenting, first with head-mounted cameras, like the GoPro, then with Google Glass, an optical, hands-free, head-mounted display that does essentially everything a smartphone can do—without breaking the sterile field.

Not only could Google Glass live broadcast educational surgeries, but its potential to link surgeons to a global network of colleagues became obvious. “If you’re a surgeon in Asia wearing Google Glass, and you run into some difficulty, think of how amazing it would be, at the command of your voice, to bring an expert into your OR at the very moment you need help.”

The technology, however, is not bug free. For example, Parekh notes that it lacks a HIPAA-compliant platform for data sharing. But he firmly believes that Google Glass represents the tip of an iceberg of game-changing technology. “I think wearable technologies like this are going to disrupt the way we practice medicine today,” he says. “And I mean that in a good way.”

Practical Apps

Parekh is far from alone. If anyone had doubts that Silicon Valley intends to target the $3-trillion-a-year US health care market, Apple and Google’s developers’ conferences held earlier this year dispelled them. Usually dominated by tablets and smartphones, the 2014 conferences were instead abuzz with the unveilings of the companies’ new health-tracking platforms: HealthKit and Google Fit. Industry watchers agree that these products signify the digital world’s first steps in its larger ambition to overhaul clinical health care using the same online tools, apps, and devices that have transformed the realms of retail, media, and finance.

For example, an Australian study found that the AliveCor Heart Monitor, a new device that records ECG readings on smartphones, offers a safe, quick, and easy way for support staff to screen patients.
for atrial fibrillation. Additionally, devices like the Helius, an ingestible biosensor that informs physicians when patients take medication, offer practical, cost-saving alternatives for conditions that require stringent medication adherence.

**Battle for Biosignal**

How a widespread digital transformation of health care will be monetized remains to be answered. Many believe that whatever changes do occur will likely be driven by consumers. If the products become popular enough, companies will likely monetize digital health tracking in the same way that Google monetized Web searches, says Jesse Slade Shantz, MD, MBA, chief medical officer of OMsignal, a company that manufactures biosensing clothing. “A lot of what’s going on now is companies trying to be the data traffickers, to serve as the pipes and plumbing for this information—it’s what we call the emerging ‘battle for biosignal.’ The companies in control of this data will be able to study it and derive insights [for] themselves.”

*Image on previous page, taken by Shawn Rocco, depicts Parekh wearing Google Glass during surgery.*

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**New Tech Entrants**

The following technological products are in the pipeline or have already been approved:

**The Cellscope Oto:** a digital otoscope that fits over your smartphone and captures images of the inner ear. Currently only available to physicians, the Cellscope is scheduled for a consumer launch later this year.

**SENSUS:** a prescription wearable device for the treatment of chronic pain, the SENSUS was approved by the US Food and Drug Administration (FDA) for over-the-counter (OTC) use in July 2014. The device employs electrical stimulation of sensory nerves to induce noninvasive pain relief, according to the manufacturer.

**The Scanadu Scout:** inspired by the “tricorder” of *Star Trek* fame, this small puck-shaped device can quickly measure body temperature, blood oxygenation, respiratory rate, and blood pressure and provide an ECG reading. It is scheduled to hit the consumer market in 2015.

**Smart pill bottle:** created by New York–based AdhereTech and expected to be available to consumers next year, this “smart” pill bottle with built-in cell phone technology alerts patients when to take medication by flashing blue. If a dose is missed, it flashes red and beeps.

**The AliveCor Heart Monitor:** approved for OTC use by the FDA in February 2014, this shell fits over iPhones and Android devices, obtains an ECG, and emails results to the user’s physician.

**The Helius:** in 2012, the FDA approved this ingestible biosensor for monitoring drug adherence. When swallowed, the tablet transmits a signal through the body to a skin patch worn by the patient, which then relays wireless messages to treating physicians.
In May 2014, Duke celebrated an achievement that few heart centers reach: the completion of its 1,000th heart transplant.

Over the course of 1,000 heart transplantations, Duke has maintained a survival rate that exceeds the national average, says Carmelo Milano, MD, surgical director for cardiac transplants. Of the largest heart transplant programs in the country, Duke is among the top 3 for best 1-year patient survival rates.

One reason for Duke’s long-term success and consistency is a team of health care professionals who manage the expanding and increasingly complex heart failure population. Physicians, nurses, physician assistants, dietitians, social workers, pharmacists, physical therapists, and administrators all play a pivotal role in the program’s success, says Joseph Rogers, MD, Duke’s senior vice chief for clinical affairs in the Division of Cardiology.

“We turn away very few patients who need heart transplants.”

“For example, Duke offers a special subprogram for patients who may have been rejected for transplants because of their advanced age. “We turn away very few patients who need heart transplants,” Milano says. The extended-criteria program offers older recipients an opportunity to receive life-saving therapy utilizing donor organs that have been deemed marginal but adequate for transplant.

Rogers also cites access to clinical trials and the availability of physicians and staff as success factors. In 2013, Duke had the fifth-largest heart transplant program in the US and the second-largest left ventricular assist device program.

Chet Patel, MD, medical director of the heart transplant program, notes that the Duke program “maintains a highly collaborative approach between cardiologists and cardiothoracic surgeons,” which leads to outstanding outcomes.

To refer a patient, call 800-MED-DUKE. (Image above shows a heart transplantation in progress.)
Sanity-Saving Practice Management Tips

By Meredith Kleeman

The daily juggling act of administering care, supervising staff, and overseeing operational needs can be challenging even under the best circumstances. A few small changes can help your practice run more smoothly (and save your sanity at the same time).

Consider implementing the following suggestions from Anne K. Glover, MD, the practice medical director for Duke Primary Care Brier Creek.

1. Organize a daily huddle. Meet with the entire practice for a few minutes at the start of each day. Review the daily schedule, basic operations information, and any staffing changes. Glover says that her team’s daily huddle is “very helpful in identifying problems before the day starts.” For instance, take this time to assess which tests or vaccines are due for each patient. When caring for children, Glover’s team prints out the North Carolina vaccine registry before each patient’s visit to make sure they have the necessary vaccines in stock.

2. Set up standing orders for diagnostic tests. When patients present with common acute complaints, assign clinical staff to obtain their medical history and conduct and process a diagnostic test before a doctor meets with the patient.

The most common conditions that Glover sees are sore throat, painful urination, and possible pregnancy, so her clinic has standing orders for strep-throat swabs, urinalyses, and pregnancy tests.

3. Establish in-room scheduling. At the end of a patient visit, have a nurse meet with the patient in the examination room to schedule a follow-up visit. Afterward, the patient can simply walk out the door without stopping at the front desk. This process frees up front-office staff and reduces wait times at the check-in/check-out station.

4. Institute direct scheduling with specialists. For hospital-based practices, explore the feasibility of implementing a direct-scheduling system with specialists from your hospital system. As part of a new program, Glover and her team can make patient referral appointments with specialists at Duke’s orthopaedic clinic. Glover says that scheduling appointments with another clinic directly makes life easier for all parties.

These simple tips can help manage disruptions, improve the patient experience, and streamline your schedule, all of which mean smoother sailing for everyone involved.
CASE STUDY

Double Ankle Replacement Eliminates Pain

Focus on optimal alignment and balance improves patient outcomes

A 69-year-old patient residing in California experienced progressively worsening bilateral ankle pain—initially it was present only during activities like running, skiing, and traveling, but it eventually limited his activities of daily living. He reported having recurrent bilateral ankle sprains that led to bilateral ankle malalignment and arthritis over time. He experienced considerable ankle swelling that created pain and numbness, especially while in ski boots. After seeing physicians in California, he learned that total ankle replacement (TAR) could be an option. In 2011, he sought consultation at Duke Medicine’s orthopaedic foot and ankle center with 6 experts who perform TAR (Samuel Adams, MD, James DeOrio, MD, Mark Easley, MD, James Nunley, MD, Selene Parekh, MD, and Karl Schweitzer, MD).

Upon evaluation with Easley, which included a clinical assessment and review of weightbearing ankle and foot radiographs (Fig 1), a CT scan was ordered to confirm that the tibial and talar bone architecture could adequately support the total ankle implants (TAIs). Although TAR for arthritis associated with valgus deformity is often more complex than for arthritis with physiologic alignment, advances in surgical technique and technology—many of which were developed at Duke—can allow for successful TAR of both ankles.

The Duke orthopaedic foot and ankle team has experience with three different FDA-approved TAIs and was able to match the patient to a suitable system. Although Duke Medicine’s foot and ankle team performs simultaneous bilateral TARs selectively, staged procedures are more commonly recommended for bilateral ankle arthritis, particularly with deformity.

Easley and co-surgeon Nunley performed the patient’s right TAR in June 2012 using a
fixed-bearing total ankle system (Fig 2). Although deformity with ankle arthritis often necessitates procedures to realign the ankle and foot, Easley and Nunley balanced the patient’s ankle with isolated ankle replacement. One year later, the same team replaced the patient’s left ankle and stabilized loose lateral ankle ligaments to ensure that the ankle implants had satisfactory balance (Fig 3).

The postoperative course is similar for most TARs: protected weightbearing and immobilization for 6 weeks, first in a cast, then in a removable boot, followed by a gradual increase in weightbearing, walking in the boot, and transition to a regular shoe. The patient says that “it was about 4 months before I was walking in a semi-comfortable way and 6 months until my joints felt normal again.” He notes that he is pain free now and still skiing.

For many years, ankle arthrodesis (fusion) has been the surgical gold standard for end-stage ankle arthritis. Investigations suggest that TAR provides equal pain relief and better function than ankle arthrodesis. “A potential advantage of TAR over fusion is seen in patients with concomitant ankle and hindfoot arthritis; ankle motion preserved in ankle replacement generally reduces stress on the hindfoot,” Easley says (Fig 4, 5).

Before considering TAR, nonoperative treatment options for ankle arthritis should be exhausted, including medical management, activity modification, bracing, and the judicious use of corticosteroid injections.

“Recent investigations, including prospective outcomes research conducted by the Duke team, show that results of TAR continue to improve, with successful outcomes and implant survivorship of approximately 95% at 5 years and just over 90% at 10 years,” Easley notes.

Over the past 5 years, Duke Medicine’s foot and ankle team has worked in one of the highest-volume ankle replacement centers in the US, Easley says. Duke performs both fixed- and mobile-bearing implants and focuses on “placing the implant in optimal alignment and balance,” he says.

Duke Medicine’s foot and ankle team maintains active clinical trial offerings, with patient-reported outcomes, and a registry of every orthopaedic surgery performed at Duke.

**Weightbearing Radiographs of a 69-Year-Old Man Before and After Ankle Replacement**

1. Preoperative anteroposterior view.
2. Anteroposterior view of right ankle at 2-year follow-up.
3. Anteroposterior view of left ankle at 2-year follow-up.
4. Dorsiflexion lateral view of right total ankle arthroplasty at 1-year follow-up.
5. Plantarflexion view of right total ankle arthroplasty at 1-year follow-up (image on previous page).
Medical groups face no shortage of regulatory mandates with which they must comply. Most often, though, it’s diagnostic-coding errors that expose practices to risk.

From penalties for false claims and errors to rejections from third-party payers, the repercussions of improper coding can devastate the bottom line. With the impending deadline for ICD-10 migration—which many predict will cause an uptick in denied claims—office administrators need a billing-compliance program now more than ever.

**Code of Conduct**

The American Health Information Management Association (AHIMA) recommends that practices start with a written code of conduct that clearly defines their commitment to ethical and accurate coding. AHIMA suggests adopting their Standards of Ethical Coding, which dictates that practices will assign only codes and data that are supported by health record documentation, query clinicians when there is conflicting or incomplete information, and commit to continuing education (see www.ahima.org).

**Training and Reviews**

Staff and physician training is critical, especially as the industry transitions to ICD-10. Practices should establish a timeline for training and testing ICD-10 compliance and identify processes for managing claims denials after the 2015 launch.

A quarterly internal audit of charges can also identify errors and training opportunities. Some practices choose 10 or more charts from each clinician and have a certified coder perform a quality assessment. Others focus on their highest-volume and highest-dollar codes and review those regularly to confirm proper billing and reimbursement.

**Documentation Check**

Insufficient documentation is a common reason for claims denials. Billing staff should review all claims for supporting paperwork before submission. Managers should ensure that their process for assigning codes and sending forms to the front desk does not create opportunities for error, says Nancy Enos, a certified ICD-10 instructor and medical practice management consultant in Warwick, RI. To enhance efficiency, she notes, many practices send the billing slip or routing form to the front desk for check-out when co-pays are collected. But those codes should be viewed as estimates until the notes are later completed. Otherwise, “there could be procedures that were billed that were not documented or vice versa,” she says.
Avoiding EHR Liability Landmines
By Emily Paulsen

When properly implemented, electronic health records (EHRs) can help improve patient care and reduce medical liability. However, what you don’t know—or don’t think about—can come back to haunt you. Here are four problem areas to guard against.

Dual Records. Numerous court cases have revolved around critical test results and other patient information that was lost during a system transition. The potential for error is one of the best arguments for taking the “big bang” approach (a complete, rather than an incremental, transition), says Lydia Washington, senior director of health information management practice for AHIMA. “Big bang is safer, but more difficult,” she says, and suggests establishing procedures to ensure synchronization of systems and giving clinicians a hard deadline for making the transition.

Data in the Cloud. Many practices opt for cloud-based storage. But what if the practice decides to switch systems or the vendor discontinues support? To avoid legal battles to gain access to data, Washington recommends that practices hire a third party to “escrow the code” and provide access to the platform so that practices can retrieve patient information and import it to a new system. Furthermore, practices should make sure to properly encrypt such information and regularly monitor systems for suspicious activity.

Inaccurate Print-Outs. “This is a big one,” says Patricia Markus, chair of the Health Information and Technology Leadership Committee for the American Health Lawyers Association. Practices involved in lawsuits or billing investigations must be able to provide proof of proper care on paper. Markus advises that practices check with their vendors to ensure that they can print the true record as it existed at the time of care—not at a later review date. The print-out should include properly labeled fields and audit trails to avoid confounding the discovery process.

Information Overload. As useful as EHRs may be, they also raise some unsettling questions, Markus says. For example, is a physician responsible for reviewing the entire record before meeting with a patient? Does the system accurately present highlights from the patient’s medical history? Such questions emphasize potential patient-safety concerns that increase liability risk, Markus says. She recommends that practices encourage clinicians to explore how the system can best present critical patient information. “You want to have what you need, not what you don’t,” she explains.
Patients with ventricular tachycardia (VT) fall into 3 categories:
- Those with heart-muscle damage (scarring) from coronary artery blockages (myocardial infarctions)
- Those with a primary heart-muscle problem (cardiomyopathy)
- Those with a structurally normal heart who have idiopathic VT, a purely electrical problem.

In 15% of VT cases, the arrhythmia locus is on the outside of the heart (epicardium), usually abutting cardiac scar tissue. Treating epicardial VT requires a specialized, more-invasive approach.

The scarred tissue provides a substrate for VT, often by serving as an electrical reentry circuit in the tissue, which interrupts and replaces the normal heart rhythm. Treatment involves a carefully localized ablation.

For an epicardial ablation, the first task is accessing the area on the outside of the heart between the muscle and the pericardial sac surrounding the heart. This procedure is based on pericardiocentesis, the long-used drainage technique for pericardial effusion or tamponade.

A specially designed needle is placed into the pericardial space and then removed as a wire is inserted, followed by a sheath or tube that fits over and eventually allows the placement of the ablation catheter. The mapping catheter infuses saline continuously, so if epicardial fluid accumulation occurs, it can be drained.

When to Refer Patients
Consider referring patients with VT to electrophysiology subspecialists for epicardial evaluation if they have:
- Right ventricular cardiomyopathy (arrhythmogenic right ventricular dysplasia or cardiomyopathy): an inherited heart-muscle condition that preferentially affects the right ventricle, but possibly also the left ventricle
- Nonischemic (non-coronary)-related cardiomyopathy: damage due to a medical condition other than oxygen deprivation
- Chagas disease: an infectious disease that can damage muscle on the outer wall of the heart, causing conduction problems and slow heart rhythms as well as VT; it is rare in the US but common in South America
- An unusual appearance of the QRS in patients with VT: arrhythmia might originate in the epicardium if the QRS complex exhibits a slurred or very gradual upstroke rather than a sharp upstroke (similar to a delta wave in patients with Wolff-Parkinson-White syndrome).
example, gene changes may affect ion channels in the heart, causing inappropriate entry or exit of sodium or potassium from cardiac cells, and can put patients at risk of life-threatening arrhythmias, syncope, or sudden death. Duke has a full-time cardiovascular genetic counselor who is trained to help interpret results and educate patients and their relatives about the implications of disease, such as a condition that precludes participating in certain sports. In some cases, patients have an inherited tendency toward arrhythmias that arise when diabetes or coronary disease develop. Polymorphisms affect 2% to 3% of the population and put patients at higher risk of sudden death if they also have cardiomyopathy or a myocardial infarction.

Because epicardial VT represents only 15% of VT cases—and most ablation centers might perform only 20 to 40 VT procedures each year—most see only a handful of epicardial VT cases. Duke receives referrals from a broad geographic territory and cares for many patients with complex advanced heart failure who are often plagued by VT. Among the roughly 150 VT cases that Duke sees each year, 18 or more epicardial procedures may be performed. Daubert notes that Duke sees the highest volume of patients with VT and epicardial VT in North Carolina.

**Comprehensive Therapies for Any Arrhythmia**

The Duke Electrophysiology Program provides services for virtually every type of electrophysiology-related case. The program offers second opinions and procedures for patients who have already had electrophysiology care (to correct atrial fibrillation and other supraventricular arrhythmias, for example). Several studies have shown that higher volumes of atrial fibrillation ablations performed by a team of experts can lead to better outcomes.

Inherited arrhythmias present problems related to diagnosis and appropriate treatment. For example, gene changes may affect ion channels in the heart, causing inappropriate entry or exit of sodium or potassium from cardiac cells, and can put patients at risk of life-threatening arrhythmias, syncope, or sudden death. Duke has a full-time cardiovascular genetic counselor who is trained to help interpret results and educate patients and their relatives about the implications of disease, such as a condition that precludes participating in certain sports. In some cases, patients have an inherited tendency toward arrhythmias that arise when diabetes or coronary disease develop. Polymorphisms affect 2% to 3% of the population and put patients at higher risk of sudden death if they also have cardiomyopathy or a myocardial infarction.

The Lead Management and Extraction Center, led by Jon Piccini, MD, features a team of cardiac experts who remove leads from pacemakers or defibrillators that have failed, been recalled, or become infected, often with *Staphylococcus aureus* or coagulase-negative *Staphyloccoci*. The challenge is freeing up the lead, which adheres to the thin wall of veins over time, such as the superior vena cava or the atrial or ventricular wall. Duke electrophysiologists and surgeons use a hybrid operating room, sophisticated x-ray equipment for guidance, laser, and other sheaths, and a cardiac surgeon is scrubbed in, ready to open the chest in the 1% to 2% of patients who experience a major vessel tear. (Image on previous page depicts a colored chest x-ray of a patient with cardiomyopathy.)

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In the summer of 2012, medical oncologist Kimberly Blackwell, MD, presented data on the monoclonal antibody-drug conjugate (ADC) TDM-1 at the American Society for Clinical Oncology (ASCO) meeting. On Feb. 22, 2013, the compound was FDA approved as Kadcyla (ado-trastuzumab emtansine; manufactured by Genentech) for advanced human epidermal growth factor receptor 2 (HER2)–positive breast cancer. Approval for Perjeta (pertuzumab; manufactured by Genentech), a monoclonal antibody that inhibits HER2 dimerization for the treatment of HER2-positive breast cancer (in combination with trastuzumab and docetaxel), followed in October 2013.

“We are now at a time when there are new therapies, or new data for utilizing therapies, nearly every other month that change the course of practice in breast cancer oncology,” Blackwell says. “We are in the infancy of understanding the importance of ADCs in triple-negative breast cancer and thinking about how ADCs can change treatment for other subtypes of breast cancer, like HER3-driven cancer.”

Blackwell, the principal investigator for the Kadcyla clinical trials, is most excited about Duke’s new therapeutic vaccine trials, which are demonstrating success in improving the innate immune response so a patient’s body can make its own anti-tumor antibodies. “This is where we are going in the future,” she says.

The Advantages of a Comprehensive Cancer Center

“For about one-half of the patients we consult with, we have something to offer that complements their existing treatments,” says Blackwell, who directs the Duke Breast Oncology Program. A woman with a new breast cancer can meet a breast surgeon, a radiation oncologist, and a medical oncologist, all of whom focus solely on the treatment of breast cancer. Appointments with other specialists and support staff, including a genetic counselor, plastic surgeon, and oncology pharmacist, can also be arranged.

Indeed, a single visit to a comprehensive cancer
center like Duke’s can change a patient’s treatment course because patients are evaluated by experts from various disciplines—all at the same location.

**Duke’s Cancer Expertise Benefits Many Patient Populations**

Duke specialists are equipped to carefully diagnose patients’ suspected inflammatory breast cancer. A team of breast-imaging experts with offices on the same floor as the clinics assist with many kinds of breast cancer and can provide the correct modalities to diagnose and determine the extent of their cancer. The team provides patients with access to aggressive therapies and clinical trial options as needed.

Patients younger than 40 years receive genetic counseling services to determine the exact parameters of their disease. Full oncofertility services are offered for those who wish to make arrangements to preserve fertility before cancer treatments. In addition, patients are encouraged to participate in group activities that provide psychosocial support.

Patients older than 70 years can often tolerate and benefit from standard forms and doses of chemotherapy for breast cancer, according to a multi-site trial that includes Duke. Gretchen Kimmick, MD, MS, runs a program that screens older patients for geriatric issues, including frailty and falls. The physical therapist in the Women’s Cancer Clinic at Duke is a breast care expert in managing lymphedema but can also screen for fall risk and help strengthen older patients.

For older patients with metastatic cancer, Kimmick and team evaluate patients for frailty, use a statistical tool to estimate survival, and discuss personal life goals to determine the best treatment plan for each patient. New targeted therapies with fewer side effects are well tolerated and may be the best treatment choice for patients who are frail or who have other comorbidities.

Duke emphasizes survivorship needs with a new program and services that complement care that patients are receiving closer to home.

**Health Clinics for Women**

Care is further streamlined by experts working closely together in the women’s health clinics at the Duke Cancer Center. Breast, ovarian, and thyroid cancer experts work in nearby offices and consult with each other as often as needed, especially because breast and ovarian cancer is often linked. This set-up is ideal, particularly in light of the recent emphasis on ovarian suppression when treating young women with breast cancer (findings from the 2014 ASCO meeting).

A sexual health clinic is also available for patients. Pelvic-floor rehabilitation, physical therapy, and sex therapy experts are on staff, and services are provided in the same way as concierge care so that patients receive only the services that they request. (Image on previous page shows a mammogram of a female breast with a cancerous tumor.)
SAVE THE DATE!
Duke Medicine Interactive
CME Workshop

Cardiology Series: Updates in the Prevention and Management of Cardiovascular Disease

Join a multidisciplinary panel of Duke Medicine faculty members and fellow community clinicians for a live, case-based CME workshop that explores topics including the recently updated guidelines for lipid management, peripheral artery disease screening and treatment, and contemporary outcomes in advanced heart failure.

Wilmington, NC
(8:00 am – 12:15 pm)
Saturday, December 13, 2014

Activity Medical Director
Zubin J. Eapen, MD, MHS
Duke University Medical Center

For more information, please call 866-858-7434 (toll-free), email info@med-iq.com, or visit www.ClinicalPracticeToday.com/CVD.

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