Winter 2015

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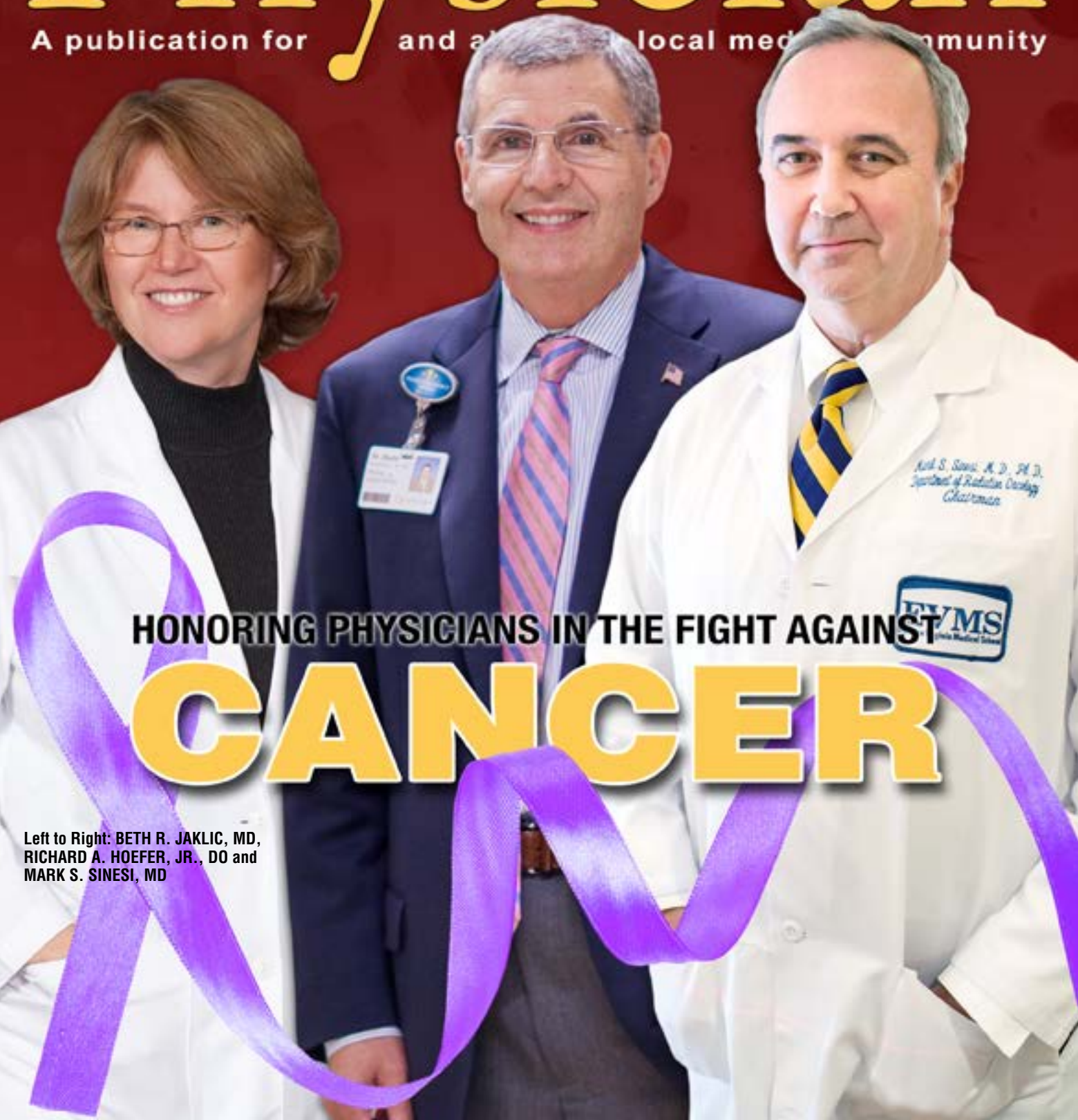
HAMPTON ROADS

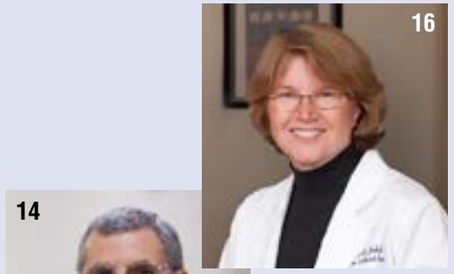
Physician

A publication for and a[illegible] local med[illegible]mmunity



HONORING PHYSICIANS IN THE FIGHT AGAINST CANCER

Left to Right: BETH R. JAKLIC, MD, RICHARD A. HOEFER, JR., DO and MARK S. SINESI, MD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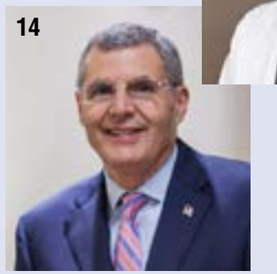
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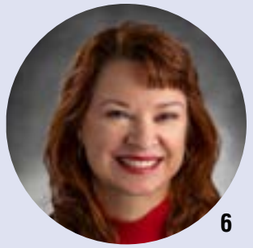
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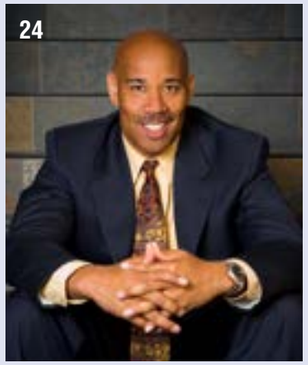
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HAMPTON ROADS
Physician
A publication for and about the local medical community

Winter 2015, Volume III/Issue I

Recognizing the achievements of the local medical community

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WELCOME
to the Winter 2015 Edition

Welcome to the Winter 2015 issue of *Hampton Roads Physician*, with which we enter our third year of publication. We want to thank every medical professional who has read our magazine, shared it with colleagues and placed it in a waiting room for patients to see. We began this endeavor to spotlight the extraordinary medical care that is available here in Hampton Roads, and your support has been both gratifying and encouraging.

You may notice some changes with this issue, and there'll be more to come in the future, as we continue to strive to provide a useful and meaningful resource for our local medical community.

The first change is an addition to our format. That is, we're adding a new regular feature: an article about a medical topic not related to the specific field in which our cover doctors practice. This issue profiles three oncologists who were nominated and chosen to represent the field of oncology – and our new secondary feature is on Infectious Disease. The addition of a secondary feature was suggested by our Physician Boards, but we're asking our readers to offer topics they'd like to see covered within these pages as well. As for the choice of Infectious Disease, with the recent and ongoing concern about the Ebola virus and what appears to be an extended and dangerous flu season, the subject could hardly be timelier.

We're introducing another topic in this issue that was likewise suggested by one of the members of our Physician Boards: a look at the frustrations that beset physicians on a daily basis, frustrations that take time away from patient care. The reports of doctors leaving (or wanting to leave) the practice of medicine are alarming, especially as concern grows whether there will be enough physicians to care for the newly insured. We wanted to know if the level of dissatisfaction being reported on a national level was reflected in Hampton Roads. Our first article on page 32 takes a preliminary look at the mood locally, and we'd like to hear from other doctors about the challenges they face. It's our hope that introducing the subject might in some small way lead to conversations that might then pave the way to solutions. We invite your comments, insights, suggestions and questions. As always, we want to hear from you!

And, it's already time to start thinking about nominations for the Spring issue. Our cover will feature physicians who treat Rheumatic Diseases, and our secondary feature will cover treating allergies and asthma in Hampton Roads. If you'd like to nominate a colleague or partner, please go to www.hrphysician.com to complete a nomination form – or if you'd prefer, call our editor at **757.773.7550** to have one emailed directly to you.

Deadline for all nominations – including cover doctors, medical professionals and good deeds physicians is March 2.

Warmest thanks and good health to all of you.

Published four times a year, Hampton Roads Physician provides a wide variety of the most current, accurate and useful information busy doctors and health care providers want and need.

Cover stories concentrate on one branch of medicine, featuring profiles of practitioners in that specialty. Featured physicians are chosen by the advisory board through a nomination process involving fellow physicians and public relations directors from local hospitals and practices.

Lynn B. Ellis, M.Ed, MS, CFNP, OCN

Peninsula Cancer Institute

Lynn Ellis has spent her entire career working in a field that many consider to be one of the most challenging: taking care of cancer patients, from the very youngest to the oldest. In the earliest years, she did so as a Registered Nurse. Today, she holds a Masters of Nursing with a Family Nurse Practitioner certification. And in January 2015, she celebrated her 10-year anniversary with Riverside Health System's Peninsula Cancer Institute.

But she didn't initially plan to pursue nursing. She received her first Bachelors degree in Psychology at Christopher Newport University, later earning a Masters in Counseling from the College of William and Mary. She liked her classes, but found it wasn't clinical enough for her, so she enrolled in the nursing program at Norfolk State University, where she says, "I definitely found my niche."

She likewise hadn't planned to focus on cancer patients, but in 1992, when she began working in the Pediatrics department at the Medical College of Virginia, she found she really liked working with that population. "What attracted me when I began taking care of these very young hematology and oncology patients was that I was able to develop long-term relationships with them and their families," she says. "The following year, I transferred to MCV's Bone Marrow Transplant department, and I was able to spend months at a time with my patients. I loved it."

In 1994, she relocated to Hampton Roads and began working in the Radiation Oncology department at Riverside Regional Medical Center, assisting patients who were undergoing radiation therapy and brachytherapy.

A little more than a year later, Ms. Ellis took a position with the Williamsburg office of Virginia Oncology Associates, administering chemotherapy to outpatients, providing patient education, assisting with crisis intervention and assisting the physicians with bone marrow biopsies and clinical trials. It was during her tenure at Virginia Oncology that she met Dr. Mark E. Ellis, a medical oncologist who she credits with eventually changing her career path. She worked with Dr. Ellis in both the Williamsburg and Hampton locations, and ultimately became the oncology nursing supervisor, before she decided to go back to school to become a family nurse practitioner.

While she pursued her CNFP certification, she worked part time as a case manager at Sentara Hampton General's Women's Imaging Center, assisting with breast biopsies, teaching clients about prevention, diagnosis and treatment modalities.

Certification in hand, she again strayed from her intended path: "I had planned to continue working for Virginia Oncology," she says, "but Dr. Ellis was opening Riverside's Peninsula Cancer Institute, and talked to me about working with him. I was trying to do what was best, and I felt that was my destined path."

Ten years later, Lynn Ellis reflects on the loss of the doctor who was so much more than a mentor. "Dr. Ellis died four years ago, and I still miss him terribly. His patients do as well. But it was so beautiful to be right alongside him, watching him build the practice," she says, adding, "We weren't related, but since I shared both first and last names with his wife, it tended to confuse some people!"

As she celebrates her tenth anniversary at Peninsula Cancer Institute, she also reflects on the demands of her job and of the work she has chosen. "I've always felt that patients facing cancer are at the most vulnerable time in their lives," she says, "and to be able to help them through that time is more than a privilege; it's a gift. People ask me how I can work in oncology, it's so sad – but I've never felt this is a sad environment. We see our heartaches, and some days we go home crying – but we also shed tears of joy when people get CT scans back that are improved. Those moments are priceless." ■

If you work with or know a physician's assistant or nurse practitioner you'd like us to consider, please visit our website – www.hrphysician.com – or call our editor, Bobbie Fisher, at 757.773.7550.

2015 Hampton Roads Physician Advisory Board

We are honored to introduce the ***Hampton Roads Physician* 2015 Advisory Board.** Their input will help guide the editorial content, format, and direction of the magazine. Along with our Emeritus Board, they will select our featured physicians.

Mary A. Burns, MD, FACOG, FPMRS
Urological Surgery
Gynecology
Dr. Burns is a partner of Virginia Beach OB GYN and Mid-Atlantic Urogynecology and is past Chairperson of Mid-Atlantic Women's Care. Her primary focus is treating female urinary and pelvic floor disorders. She operates at Sentara and Bon Secours DePaul Hospitals.

Emmeline C. Gasink, MD, FAAFP, CMD
Family Medicine
Dr. Gasink serves as the full-time Medical Director for the Riverside's Warwick Forest campus in Newport News. She is Board certified in Family Medicine.

Bryan Fox, MD
Orthopaedic Surgeon
Dr. Fox joined Sports Medicine & Orthopaedic Center (SMOC) to establish an adult spinal surgery arm of the practice at Obici Hospital where he is Chief of surgery. He is an expert in minimally invasive spine surgery techniques.

Boyd W. Haynes III, MD
Orthopaedic Surgeon
Dr. Haynes is the Senior Partner at Orthopaedic & Spine Center in Newport News, VA. He is Fellowship-trained and Board certified in Sports Medicine and Orthopaedic Surgery and specializes in minimally-invasive, outpatient Joint Replacement, Sports Medicine and Endoscopic Carpal & Cubital Tunnel Release surgeries.

Jerry L. Nadler, MD, FAHA, MACP, FACE
Internal Medicine
Dr. Nadler serves as the Vice Dean for Research and the Harry H. Mansbach Professor of Medicine and Chair, Department of Internal Medicine at EVMS. He is Board certified in Internal Medicine and Endocrinology and was elected to Mastership in the American College of Physicians for excellence and distinguished contributions to internal medicine.

Paa-Kofi Obeng, DO
Internal Medicine
Dr. Obeng provides a full spectrum of health care services for adults with an emphasis on preventive care at Nansemond Suffolk Family Practice.

Michael J. Petruschak, MD
Diagnostic Radiology
Dr. Petruschak is Director of Breast Imaging at Chesapeake Regional Medical Center. He is Board certified in Diagnostic Radiology and fellowship trained in body imaging.

Michael Schwartz, MD
Pathology
Dr. Schwartz is a pathologist with Peninsula Pathology Associates and practices at Riverside Health System. He is Board certified in Anatomic and Clinical Pathology.

Jyoti Upadhyay, MD, FAAP, FACS
Associate Professor of Department of Urology and Pediatrics
Dr. Upadhyay is a staff pediatric urologist at Children's Hospital of the King's Daughters with special interests in complex genitourinary reconstruction.

Elizabeth Yeu, MD
Ophthalmology
Dr. Yeu is a partner to Virginia Eye Consultants and specializes in Cornea, Cataract, Anterior Segment and Refractive Surgery. She is Assistant Professor of Ophthalmology at Eastern Virginia Medical School.

CANCER IN 2015

A look back, and a look ahead

Long before chemotherapy, radiation and surgery existed, people were dying of the disease we call cancer, although 'the C word' itself wasn't used until four centuries before the Common Era.

In its brief history of cancer, the American Cancer Society tells us the origin of the word cancer is credited to Hippocrates, the Father of Medicine. He used the terms carcinos and carcinoma, referring to a crab, to describe non-ulcer forming and ulcer-forming tumors, probably because the finger-like spreading projections from a cancer resembled the shape of a crab. The Roman physician Celsus later translated the Greek term into the Latin 'cancer.' Galen used the word 'oncos' (Greek for swelling) to describe tumors. Although the crab analogy is still used to describe malignant tumors, Galen's term is now used as a part of the name for cancer specialists – oncologists.

The ACS also notes that human beings and other animals have had cancer throughout recorded history. Some of the earliest evidence of cancer has been found among fossilized bone tumors, human mummies in ancient Egypt, and ancient manuscripts. Evidence of bone cancer, and head and neck cancers has been observed in mummies, and a description of cancer was found in a papyrus dating back to 3000 BC, noting eight cases of tumors of the breast that were removed by cauterization.

Surviving cancer in 2015 is a different story, but there are differences of opinions about the future.

In 2014, two published studies posited very different opinions about the probability of dying of cancer in the future. The US version, reported by the American Society of Clinical Oncology, stated that, "In 16 years, cancer will become the leading cause of death in the United States, surpassing heart disease. The number of new cancer cases is expected to increase nearly 45% by 2030, from 1.6 million cases to 2.3 million cases annually."

People in the United Kingdom got a much better prognosis: a headline reporting on a study by researchers from University College London and King's College London said "deaths from cancer will be eliminated for all age groups except the over-80s by 2050, if recent gains in prevention and treatment carry on apace."

The outlook for cancer patients may not be as bleak as the US study suggests, nor as rosy as the UK claims.

The American Cancer Society's recent annual report, Cancer Facts and Figures 2015, estimates that there will be 848,200 new diagnoses of cancer in American men, and 810,170 new diagnoses in women. The report noted that lung, colon, prostate, and breast cancers continue to be the most common causes of cancer death, accounting for almost half of the total cancer deaths among men and women. More than one out of every four cancer deaths, or 27 percent, is due to lung cancer.

The top three men's cancer diagnoses are estimated to be as follows in 2015:

Prostate	26 percent
Lung and bronchus	14 percent
Colon and rectum	8 percent

For women, it breaks down like this:

Breast	29 percent
Lung and bronchus	13 percent
Colon and rectum	8 percent

The numbers for survivorship.

The American Cancer Society notes that the number of Americans with a history of cancer is growing due to the aging and growth of the population, as well as improving survival rates. Nearly 14.5 million Americans with a history of cancer were alive on January 1, 2014, not including carcinoma in situ (non-invasive cancer) of any site except urinary bladder, and not including basal cell and squamous cell skin cancers. The ACS estimates that by January 1, 2024, the population of cancer survivors will increase to almost 19 million: 9.3 million males and 9.6 million females.

As the ACS report noted, lung cancer death rates declined 36 percent between 1990 and 2011 among men, and 11 percent between 2002 and 2011 among women, due to reduced tobacco use. And although that seems like good news, lung cancer remains the leading cancer killer in both men and women in the United States. In fact, according to the American Lung Association, lung cancer causes more deaths than the next three most common cancers combined (colon, breast and pancreatic). An estimated 159,260 Americans were expected to die from lung cancer in 2014, accounting for approximately 27 percent of all cancer deaths.

So what is the future of cancer care?

Whether in America or the United Kingdom, or in fact anywhere in the world, advances in cancer are happening every day. It's not necessary to look beyond our own geographic borders in Hampton Roads to find the most innovative cancer treatments being employed every day, which are extending and saving lives.

HOPE Magazine began publishing in 2011, and has since then included comprehensive articles about the physicians, practices, hospitals and institutions in Hampton Roads that have dedicated themselves and their resources to the fight against cancer.

Our profile of Dr. Beth Jaklic describes major colon and rectal cancer surgeries that can now be done laparoscopically, resulting in many fewer cases that require permanent colostomy while greatly reducing post-operative pain and recovery times. The acquisition of genetic information is enabling oncologists to modify chemotherapy regimens based on the individual specifics of a patient's cancer, thus avoiding treating patients with drugs that cannot help them.

Dr. Richard Hoefer describes two new promising modalities: heated intraperitoneal chemotherapy, or HIPEC, which has shown gratifying results for patients with a variety of cancers; and for early stage breast cancer patients, there is intraoperative radiation, administered during lumpectomy and showing promising results equivalent to whole breast radiation.

As Dr. Mark Sinesi notes, an innovation in radiology, SIR or selective internal radiation, which treats cancer in the liver by

The American Cancer Society's recent annual report, Cancer Facts and Figures 2015, estimates that there will be 848,200 new diagnoses of cancer in American men, and 810,170 new diagnoses in women.

injecting radioactive microspheres directly into the tumor, blocking the blood supply that feeds the tumor while delivering radiation directly to it.

Medical oncologists and cancer specialists in Hampton Roads routinely conduct clinical trials of new medications that are developed to treat cancer, and contribute to the literature that physicians rely upon in caring for these vulnerable patients.

How to find out what's happening here, in Hampton Roads.

HOPE Magazine began publishing in 2011, and has since then included comprehensive articles about the physicians, practices, hospitals and institutions in Hampton Roads that have dedicated themselves and their resources to the fight against cancer. Each issue deals with a specific kind of cancer – lung, skin, prostate, head and neck, etc., and highlights the oncologists who treat them and the innovative modalities they employ.

Available online and in oncologists' offices and cancer treatment facilities throughout Hampton Roads, *HOPE* is a trusted resource for physicians and patients alike. Visit www.hopecancermagazine.com. ■

Cancer Statistics, 2015. Published early online January 5, 2015 in CA: A Cancer Journal for Clinicians. First author: Rebecca Siegel, MPH, American Cancer Society, Atlanta, Ga.

Cancer Facts & Figures 2015. Published online January 5, 2015. American Cancer Society, Atlanta, Ga.

The website of the American Lung Association, January 20, 2015.

The website of the American Cancer Society, January 20, 2015.

Overcoming Cancer in the 21st Century, University College London and King's College London, David Taylor, MD.

GOOD DEEDS

Honoring physicians who are doing community service locally or outside the state or nation.

Susan B. Girois, MD, MPH

Medical Director, JenCare Neighborhood Medical Centers

Susan Girois (née Brown) was born in Zaire (now the Democratic Republic of the Congo), the daughter of medical missionaries who devoted their entire careers to serving some of the poorest people on earth, both in Africa and in Haiti. It was from them – from her physician father and anthropologist mother – that she learned the values that have guided her own life of service, both as a medical professional and as a passionate advocate for access to healthcare where there is none.

When she was very young, she began helping her father manage vaccination programs for children in outlying villages. During high school summer breaks, she'd care for severely malnourished kids: "I'd help scrub their scabies, do nutritional assessments, help with teaching," she says, "anything to relieve suffering."

Not the stuff of typical teenage girl dreams, but her childhood was anything but typical: "I remember my mother's involvement in the early 80s with the AIDS epidemic in Africa," Dr. Girois says. "My sister and I were in middle school, and Mom would ask us to brainstorm with her about how to talk to African teenagers about HIV prevention. My parents' choice was a life and a profession of serving the underserved. Through this I learned to appreciate the inherent value in every human being. I also learned to question and challenge the status quo."

After finishing high school in Kinshasa, she came to America to attend the College of William and Mary and medical school (VCU, then Penn State). She returned to Africa during her summers, often taking on ambitious projects, one of which was a survey of Zairean women on their risk of HIV, including focus groups for women who had been forced to sell their bodies to subsist.

After completing her internship and residency in internal medicine at the Hospital of the University of Pennsylvania, she returned to Africa, to Botswana, where she served as advisor to the national anti-retroviral team for the development and implementation of a national strategy to treat HIV.

In 2002, she accepted a position with a French humanitarian organization – Handicap International – helping people with disabilities in developing countries. In Southeast Asia, she worked with the blind and deaf, as well as those who had suffered the sequelae of landmines from the war, always focusing on trying to improve access to basic healthcare for these individuals. "I had worked for so long with HIV and AIDS patients," she says, "but I realized it's the same for people with disabilities and mental illness. These are men and women who are stigmatized, people blocked by the system, people with incredible need. It's to these people that I gravitate."

Three years ago, Dr. Girois returned to the US with her husband and two sons, now 9 and 11. She worked with the Norfolk Community Services Board before becoming Medical Director of JenCare Neighborhood Medical Centers in Tidewater, an organization that provides primary care for another vulnerable population: low to middle income seniors on Medicare.

She sees many pockets of need in Hampton Roads, and is eager not just to serve them herself, but to influence other heath care providers to become involved as well. "There are organizations doctors can support with their skills and their time," she says. "There's Homeless Connect, where physicians can provide medical services to the homeless, specialists can offer pro bono services through Access Partnership, volunteer at the Western Tidewater Free Clinic or the EVMS HOPES Clinic."

With a degree in public health, Dr. Girois has a passion for working at a systems level to change health outcomes for vulnerable and high-risk groups. "This is what attracted me to JenCare, a primary care leader in today's transitioning health care environment. What's the reward? My entire career I've found resilience and dignity among the people I serve. That's invigorating! That's the reward I'd like my fellow physicians to know." ■

If you know physicians who are performing good deeds – great or small – who you would like to see highlighted in this publication, please submit information on our website – www.hrphysician.com – or call our editor, Bobbie Fisher, at 757.773.7550.

RICHARD A. HOEFER, JR., DO, FACS

Sentara Surgery Specialists
Medical Director, Sentara Cancer Network

Surgical oncology wasn't Rick Hoefer's first choice for a career. A lifelong athlete, he liked working in the training room as much as playing the sports; and at Gettysburg College, where the training room was much better equipped than his high school's, he became enthusiastic about coaching and physical therapy. In fact, when he entered graduate school at the University of Pennsylvania, his sights were set on a degree in physical therapy. But he soon discovered he was much more drawn to his anatomy lessons, and decided to pursue a career in medicine, and to become a surgeon.

He earned his medical degree from the Philadelphia College of Osteopathic Medicine. While a medical student, he was assigned to Dr. C. Everett Koop's Pediatric Surgery Service at Children's Hospital of Philadelphia. "Dr. Koop and his chief fellow at the time, Dr. Moritz Ziegler, were wonderful to work with," Dr. Hoefer says. "Their influence was profound." Both pediatric surgeons, they motivated Dr. Hoefer to want to become a pediatric surgeon. Ultimately, he chose surgical oncology, he says, because he wanted patients he could talk to. After medical school, he completed an internship at the Malcolm Grow Medical Facility at Andrews Air Force Base in Maryland, followed by a second internship and residency at Wilford Hall Medical Center at Texas's Lackland Air Force Base. He then served a fellowship in surgical oncology at M. D. Anderson Cancer Center.

Following his fellowship, Dr. Hoefer served at David Grant USAF Medical Center and Wilford Hall USAF Medical Center as a surgical oncologist and residency training officer. During that time – 1984-89 – he also served as Consultant to the U.S. Surgeon General. He returned to active duty to serve as Chief of Surgery for the 159th MASH unit in Iraq during the Persian Gulf War. In 1991, he and his wife, Dr. Elizabeth Harden, a medical oncologist, moved to Hampton Roads, where they have both practiced ever since.

Dr. Hoefer has devoted his practice to caring for patients with breast, colorectal, hepatobiliary, pancreatic and melanoma cancers. "It's a very exciting time to be in oncology," he says. "There are new modalities and techniques for treating a number of cancers, even those aggressive cancers that carry the more formidable prognoses."

Dr. Hoefer and his colleagues in the Sentara Cancer Network are addressing one of the most formidable of all – pancreatic cancer. "In 2009, we wanted to improve the quality of pancreatic cancer treatment, so with the help of Dr. Roger Perry at EVMS and many others, we developed a pancreatic cancer consortium within the Network," he says. "We developed a web-based bi-weekly conference, where the five of us who perform the majority of pancreatic surgeries in the area – Doctors James Schneider, Roger Perry, Eric Feliberti and Jason Wilson and myself – present our cases. Our colleagues in pathology, gastroenterology, medical oncology, radiation oncology, and radiology join us as well; so every subspecialty reviews and discusses each case in real time, making recommendations and functioning as a cohesive team."

The members of the consortium look very carefully at outcomes and quality metrics: during the past two and a half years, their postoperative mortality for surgery is less than the national average of two percent. "That's as good as you can get anywhere in the country," Dr. Hoefer says. That statistic includes pancreatic ductal carcinoma as well as neuroendrocine, duodenal and bile duct tumors. Even with early diagnosis, it's still among the most formidable prognoses, he acknowledges, because there aren't many patients who don't have positive nodes or negative margins.

Dr. Hoefer and his partner, Dr. Dennis Cruff, have also performed two Whipple procedures in the past year laparoscopically. "It's being done at several centers around the country, but we're the only ones who've performed it in Hampton Roads so far," he explains. "Patients have to be very carefully selected, but we think it's going to be equivalent to doing an open operation, with a much easier, greatly shortened recovery period for the patient."

There is another promising modality available for patients with colon and rectal metastases, ovarian cancer and appendiceal cancers and pseudomyxoma – and in rare cases, those with mesothelioma and even gastric cancer, Dr. Hoefer notes: heated intraperitoneal chemotherapy, or HIPEC. HIPEC is administered after the gross tumor is removed from the abdominal cavity (cytoreduction), and can add as much as two hours to an operation. "We started our program in 2005 at Sentara Careplex," he says. "We've done close to a hundred HIPEC procedures thus far, and the results have been very gratifying. We've had several colorectal cancer patients who are now five or six years out from surgery and doing well."

For breast cancer patients, Dr. Hoefer and his colleagues offer another innovative treatment not being done elsewhere in Hampton Roads: intraoperative radiation. For early stage cancers, it's administered during lumpectomy, and has shown promising results equivalent to whole breast radiation. He and Dr. Wilson, along with Dr. Song Kang, have contributed to abstracts being presented this Spring to the American Society of Breast Surgeons and the Society of Surgical Oncology.

Dr. Hoefer has a personal connection with breast cancer: his mother, after watching her mother and her sister suffer with breast cancer, and her step-daughter die of breast cancer, made a grant to Sentara to establish the center that bears her name: the Dorothy G. Hoefer Comprehensive Breast Cancer Center, which he serves as Co-Director with Dr. Kelly Allison. "It's very humbling for me," he says, "that they named the Center for her."

BETH R. JAKLIC, MD

Chesapeake Surgical Specialists

For Beth Jaklic, becoming a physician was always a given, but it wasn't until she was on a Navy ship in the Persian Gulf that she decided to focus on colorectal surgery. "I started thinking about it at the end of my surgical residency," she says, "I was on the USS GEORGE WASHINGTON as a general surgeon, and I decided that's what I wanted to do."

Besides knowing she wanted to be a surgeon, she'd also known she wasn't going to be ready to settle down in one place after medical school, so she applied to the Navy scholarship program and was accepted at the University of Virginia – her first choice. She did both her internship and residency in general surgery at the National Naval Medical Center in Bethesda, followed by a fellowship in colon and rectal surgery at the University of Minnesota at Minneapolis.

"When you're a general surgery resident, you see a lot of trauma, cardiothoracic cases, the 'glamorous' stuff," she says. "It's not until you become more senior and you get to do the bigger, abdominal cases and the complex anorectal cases that you discover how rewarding that is." She was drawn to colorectal surgery because her practice wouldn't be limited to a specific age or gender. And she'd have the opportunity to develop more involved doctor-patient relationships. She explains: "With general surgery, it's largely an acute problem that you fix, and then you're done. With colon and rectal cases, you're dealing with issues that are more chronic, especially cancer. With cancer, you often make the diagnosis, you do the workup, you do the surgery and you follow them for at least five years."

And, she adds, the operative aspects and procedures, and the opportunities to work with other physicians, remain a huge draw. Dr. Jaklic retired from the Navy in 2012, and joined the staff of Chesapeake Surgical Specialists. She had not only found her specialty, but her home as well. "I really like Hampton Roads," she says. "I knew I wanted to stay."

"I started thinking about it at the end of my surgical residency," she says, "I was on the USS GEORGE WASHINGTON as a general surgeon, and I decided that's what I wanted to do."

Treating colorectal cancer remains a challenge: it's still the third most commonly diagnosed cancer and the second leading cause of cancer death in both men and women in the US. It's estimated that there will be 140,000 new cases of colorectal cancer in 2015, and 56,000 deaths. But the news isn't all bad, Dr. Jaklic assures her patients – although even to that good news she must append a caveat: "There's been a 30 percent drop in colorectal cancer in the last decade, but that's only in people over the age of 50." The caveat? The incidence of colorectal cancer is rising in people under 50. In fact, a November 5, 2014 article in JAMA Surgery noted that the increase in colorectal cancers is most pronounced among men and women between the ages of 20 and 35.

While it's not known for certain what accounts for the rise in colorectal cancer among the young, Dr. Jaklic agrees with the American Cancer Society that the decreased incidence in older Americans is due to increased screening. "Unlike any other screenings we do – PSAs, mammograms – colonoscopy is the only one that detects precancerous lesions and gets rid of them before they do permanent harm," she says. "I tell patients that almost all colon cancers start out as polyps, and a colonoscopy will find and remove them. And I tell them about the very high cure rate – 90 percent if detected early. Some of them are surprised to learn that."

She tells them something else that surprises them: they don't need a colon at all. "I explain that the colon mainly just absorbs water and packages up the stool, but has very little to do with nutrient absorption," she says. She understands the reluctance of her patients to seek medical attention when they experience symptoms: "A lot of patients are under the impression that any kind of colon surgery involves having a colostomy," she says. "I'm surprised at how often people think they'll need to wear a bag for a while or forever, when we'd never even consider it."

Unfortunately, this thinking keeps many patients from seeking treatment at all. And yet, Dr. Jaklic stresses, "with current technology, and sometimes after radiation, we're able to get lower and lower and remove all but the very lowest of tumors, and still put things back together with no need for permanent colostomy." And because she's able to perform 99 percent of her cancer surgeries laparoscopically, her patients have less pain, and a shorter hospital stay and recovery time.

It's not just the advancement in surgical techniques, she adds. "We're doing more with genetics , modifying chemotherapy based on the specific genetic properties of the individual colon cancers. We can more specifically tailor a chemotherapy regimen so we're not giving chemo to people who wouldn't benefit from it."

With DNA testing, Dr. Jaklic says, "We can look for syndromic conditions like Lynch syndrome and polyposis in at-risk patients that help us determine whether anyone in the patient's family needs to get screened earlier, and guide treatment for the index patient." And, she notes, there are tests coming closer and closer to fruition that will allow physicians to test for cancer in a patient's stool, without bowel prep. "Unlike colonoscopy, where we're actually finding benign polyps and removing them, this is more of a marker of cancer that's already there, or an advanced polyp – but without the necessity of bowel prep, we can screen more people." And, she hopes, because it's a lab test, more people will undergo the life-saving screening. ■

MARK S. SINESI, MD, PhD

Chair, EVMS Radiation Oncology

Unlike many medical students who chose their specialty during their third year, Mark Sinesi knew what he wanted to pursue even before he entered med school at Boston University. He had completed a doctorate in chemical engineering at Temple University, interested in research focused on chemical radio protection – that is, the development of molecules that would shield against radiation injuries. "And as I learned more and more about radiation and its biological effects," he says, "I became more interested in clinical medicine. So when I went to medical school, it was with the specific intention of becoming a radiation oncologist."

He knew it was a relatively small field – in fact, there are only 78 training programs in the entire country, and many of them turn out no more than one or two radiation oncologists a year. "Not everybody is interested in quantum physics and the other areas of physical science that we're excited about in radiation oncology," Dr. Sinesi explains. He went on to do his internship at Carney Hospital and his residency in radiation oncology at Tufts, and a fellowship in radiation biology at Colorado State University.

Since coming to Hampton Roads in 1990, Dr. Sinesi has treated cancer patients in almost every hospital in the region. He has served as Medical Director of the cancer treatment centers of Obici Memorial Hospital, Maryview Medical Center, Sentara Careplex Hospital, Ahoskie Medical Center and Outer Banks Hospital; and as Medical Director of the Department of Radiation Oncology of Sentara Norfolk General and Sentara Virginia Beach General Hospitals. Since 2005, he has held the position of Chair of the Department of Radiation Oncology at Eastern Virginia Medical School, where he also serves as Elective Supervisor in Radiation Oncology for M4 students, and offers medical student shadowing for M2 students looking to explore the field of radiation oncology.

As oncologists, Dr. Sinesi says, "We're driven by scientific method, but also with a commitment to multidisciplinary cancer management. In the modern management of cancer, there are essentially three tools in the box: surgery, chemotherapy and radiation. The successful interplay of these three subspecialties guides us in designing a comprehensive management plan, which stacks the deck in the patient's favor. We use conservative surgery, plus added radiation and/or chemotherapy whenever we can, as opposed to radical surgery."

Because of the improvements in surgical techniques and chemotherapies, biologic therapies and others, he says, the job of the radiation oncologist is to wipe out that last little bit of cancer that might remain after the other therapies have done their work. Fortunately, modern techniques of radiation can greatly minimize collateral damage to surrounding tissue. "We use image guidance, either by PET, MRI or CT, that allows us to focus on our cancer target more accurately than ever before," Dr. Sinesi explains. "The ultimate expression of that capability in our clinic is the CyberKnife®."

The CyberKnife®, which was installed at Sentara Norfolk General Hospital in early 2008, provides continual image guidance software that allows the delivery of high radiation doses with pinpoint accuracy, while adjusting to a patient's breathing cycle – thus automatically correcting for tumor movement. "With CyberKnife®, we can address small lung cancers or brain tumors that might otherwise require surgery," he says.

There are radiation medicines for certain lymphomas, which have shown very high efficacy, as well as targeted radiation by the implantation of radioactive substances into the cancerous area. "Brachytherapy is one example," Dr. Sinesi notes. "That's allowing us to do a five-day breast cancer radiation rather than the customary six-week regimen." But he cautions, "Not everybody is a candidate for the newer modalities. We always individualize treatment to each patient's specific situation."

He's excited about a new type of brachytherapy being done at EVMS and Sentara Norfolk General: SIR sphere – selective internal radiation – a means of treating cancer in the liver, whether primary or having originated in another organ in the body. "Typically, these are rare cancers that are either incurable or very difficult to cure," he says, for which the usual treatment would be chemotherapy that would produce a reduction in the patient's overall malignant burden. When the patient went off the chemotherapy, the cancer would come back, and another cycle of chemotherapy would begin. Ultimately, after a few cycles, the patient's bone marrow and immune reserves would wear out. There was no viable means of expanding the patient's healthful, useful life span until the advent of SIR.

Dr. Sinesi explains the procedure: "SIR consists of the injection of radioactive microspheres directly into a tumor in the liver." Still a relatively new procedure, SIR is done in collaboration with interventional radiologists. Using fluoroscopic guidance, the team threads a catheter through the femoral artery in the leg, into the liver and into the hepatic artery. "There are two benefits," he says. "First, it chokes off the blood supply that feeds the tumor by blocking the arterial supply with the microspheres; and second, it's delivering radiation directly to the tumor."

It is in the hands-on treatment of cancer patients that he finds the most satisfaction. "I'm interested every day in helping people who have cancer to become cancer free, in a manner that's as hard on the cancer and as easy on the patient as possible," he says. "It's brought home to me every day that this is both a humanitarian and a scientific endeavor."

And, he adds, "It's energizing; the most wonderful endeavor I could ever imagine. I am doing exactly what I was put on earth to do." ■

MEDICAL UPDATE:

INFECTIOUS DISEASE

OUTBREAK: NO LONGER THE STUFF OF HOLLYWOOD MOVIES

Nancy M. Khardori, MD

Daniel Kluger, MD

Conrad Schwab, MD

Contagion. 12 Monkeys. The Andromeda Strain. Even *Rise of the Planet of the Apes* and *World War Z.* Since the last half of the 20th century, there's been no shortage of films and TV series about infectious diseases and their sequelae. Audiences seem to have a fascination for anything that threatens humanity, and pandemics are no exception – especially when they're getting the full Hollywood treatment.

The reality in 2015 is very far removed from a movie soundstage. A report released on December 18, 2014 by the Trust for America's Health and the Robert Wood Johnson Foundation found that the recent Ebola outbreak "exposes serious underlying gaps in the nation's ability to manage severe infectious disease threats." The report, entitled *Outbreaks: Protecting Americans from Infectious Diseases*, concluded that the entrance of Ebola into the United States – along with Angelina Jolie's chicken pox and the National Hockey League's mumps outbreak – "highlighted cracks in America's public health defense against infectious disease."

The Trust for America's Health report cited the nation's half-hearted defense against Ebola and other infectious diseases on complacency. Dr. Kent Brantly, an American doctor who contracted Ebola while treating patients in Africa, and others are working to correct that. In a December 15, 2014 interview with NPR, Dr. Brantly said this: "It's a good thing that this is still a conversation in our government and in our public. People are still dying every day in West Africa from Ebola, and that sense of urgency I expressed back in September is still very much there." And on December 30th, actor Jeffrey Wright and his *Hunger Games* cast mates, along with anthropologist and physician Dr. Paul Farmer, teamed up with the Ebola Survival Fund to produce an online video about the virus's devastating effects. Their goal was to use social media to raise awareness about the worldwide crisis, and also to temper fears on the home front by underlining that available resources differ vastly in both quality and quantity.

Ebola is actually just one of a large group of viruses, says Dr. Nancy M. Khardori, Professor of Medicine and Chief of Infectious Disease at EVMS. It's dreaded because it's fatal so much more often than others, and because it's so transmissible. "The world has become a global village," she explains, "and it doesn't take long for a disease that appears in one country to spring up in another country. That's why it's so important for everyone – medical and lay people alike – to remember that we can no longer think that we're safe if Ebola appears in a far off country. It can get to places very quickly, as it got to America."

Dr. Khardori believes there may be a vaccine for Ebola within the next five years. For now, the best results appear to come from taking the blood of an Ebola survivor and using it to help fight the disease. As he was returning home from Africa, Dr. Brantly received a blood transfusion from a 14-year Ebola survivor. He survived, and has now donated his own blood for other patients. Dr. Khardori explains: "When a patient survives, it means his body was able to produce an antidote that fights the infection. His blood can be duplicated in the laboratory to produce monoclonal antibodies. These antibodies bind to the virus and prevent it from spreading."

It's not just the recent, high-profile Ebola cases that are giving infectious diseases specialists in Hampton Roads cause for concern. "Complacency is definitely a problem in the area of HIV," says Dr. Daniel Kluger of Riverside Infectious Disease Specialists. "The message that HIV is still out there, and potentially devastating, is not as wide spread. The number of new cases hasn't changed in decades – as many as 50,000 new cases each year nationally," he says. And unfortunately, there's a significant population that's HIV positive, but undiagnosed. "The fact that there's such a large burden of people who haven't been tested or who deny the results helps perpetuate the ongoing epidemic," he says. "And left untreated, the natural history of HIV without intervention is that that patient will go on to develop AIDS in 10 or 12 years, and ultimately die from it."

Yet there is no need to die from HIV, confirms Dr. Khardori. "AIDS at this point has become a chronic disease, very easily treatable in most cases. Very seldom do we find a situation where we cannot control the disease."

That is, of course, if the patient is compliant. "You can look at HIV as a success story in terms of the highly effective antivirals we have today," says Dr. Conrad Schwab, an infectious disease specialist with Bayview Physicians. "New treatments continue to come out that are much less toxic and more potent, better tolerated and easier to comply with." In August of 2014, Dr. Schwab says, the FDA approved a once-daily fixed-dose combination of drugs called Triumeq. Like other HIV therapies, Triumeq is expensive, Dr. Schwab says, but adds, "We are fortunate that there is state assistance for people who need medications, and drug companies do try to provide copay assistance for those who qualify. These drugs are covered by standard insurance to a lesser degree. Cost shouldn't be a barrier to getting treatment."

Triumeq doesn't involve boosted protease inhibitors, and the less frequent dosing makes it more effective. "We used to have to tell patients to set their clocks every four hours, to take their dose," Dr. Schwab says. "Today, we can give them one pill, and if they take it

A report released on December 18, 2014 by the Trust for America's Health and the Robert Wood Johnson Foundation found that the recent Ebola outbreak "exposes serious underlying gaps in the nation's ability to manage severe infectious disease threats."

regularly, they can have a lifespan that comes close to matching that of someone who isn't infected."

The flip side, unfortunately, is that infectious disease specialists are seeing resistance to many of their treatments emerge as well. "Antibiotic agents became available in the early 1940s," Dr. Khardori explains, "and they have been quite effective at saving lives. But they've been used so widely that the organisms they're designed to kill have adapted and have become resistant." For years, she says, patients adamantly demanded antibiotics for themselves and their children, although the trend has lately reversed. But more public education is still needed to help patients understand the doctor's reluctance to prescribe them.

"We can't always identify the exact bacteria that's causing the infection," Dr. Khardori says, "and while antibiotics aren't toxic, if we give an antibiotic that won't cure the infection, the patient has been exposed to antibiotics for no reason."

Help from the microbiology lab may solve the challenges of diagnosis. "I attended a conference last year where we were told that the person in the microbiology lab would become our best friend," Dr. Schwab says, "because there are polymerase chain reaction tests they have now for influenza, which can keep us from giving medication to someone it cannot help. I dream of the time when a patient might present with pneumonia, and we can do a test for viral and bacterial organisms right then and there. I think in the future, there will be multiple tests we can run on the same specimen to get a more complete picture."

In fact, Dr. Schwab says labs are coming out now with a blood test that will allow doctors to tell if a patient has staph aureus, and if it's resistant – the MRSA type of staph aureus – physicians will know immediately what kind of antibiotic to prescribe. As a member of the infection control committee at Chesapeake Regional, he is excited about the new medications that are available to treat these conditions – and for the advancements in diagnosing them.

One diagnosis that can – and should – be made is Hepatitis C. It's a viral infection, and the leading cause of cirrhosis of the liver, as well as in transplant failure. There are about 3.2 million Americans infected with HepC, and 17,000 new cases every year. "We haven't had a good treatment for it," Dr. Schwab notes, "but now new combination treatments, while costly, are better tolerated and have dramatically improved the sustained virologic response rates from 50 percent or lower of older combination therapies to well over 90 percent, while shortening the treatment duration from one to two years to a few weeks or months. That is revolutionizing Hepatitis C treatment, much as happened with HIV treatment in the late 1990s."

A further word about vaccinations. A January 8, 2015 article in *The Los Angeles Times* reported that as many as 12 measles cases had been connected to visits to Disneyland and Disney's California Adventure Park. At least six of these cases occurred in people who were unvaccinated for the disease, two of whom were infants. It's not the first such report of measles in the United States. "There are outbreaks nationwide, and this is something that just should not be happening," Dr. Kluger says. "It's really disappointing, in the year 2015, to still be arguing about this."

Dr. Kluger is referring to a 1998 paper published in The Lancet, written by Dr. Andrew Wakefield, which linked various childhood behavioral and intestinal problems to the MMR vaccine. The paper was retracted and labeled 'fatally flawed' by The Lancet in 2010 when it was revealed that Dr. Wakefield had fabricated his research. He was later cited for ethical misconduct, but unfortunately, people still point to his research to rationalize withholding vaccines from their children. "The American Academy of Pediatrics weighs the evidence before they make any recommendations," Dr. Kluger says. "I agree 100 percent with its recommended vaccination schedule."

Finally, a look at the 2015 flu. The season is earlier this year than usual, and strain that is circulating for the most part isn't included in the vaccine released in the Fall. "The choice of strains is usually made the Spring before, based on the predictions, last season's information," Dr. Kluger says, "but they're just predictions. But while the vaccine isn't as active as we would have hoped, I still believe everyone should get it."

That, and constant vigilance about hygiene, especially handwashing, Dr. Schwab says, "We preach prevention." Dr. Khadori agrees: "Microbes are microscopic. What you don't see can hurt you." ■

Our Medical Update in the spring edition will focus on Treating Allergy and Asthma in Hampton Roads. If you would like to contribute to this article, please contact our editor: bobbie@hrphysician.com

WHAT IS PAIN?

A simple question with simple and complex answers.

By Victor Tseng, DO

According to the International Association for the Study of Pain, it is "an unpleasant sensory and emotional experience associated with actual or potential tissue damage, or described in terms of such damage." Often people think that Pain Management doctors just write prescriptions for pain medications, mostly opiates. These medications undoubtedly relieve pain, but they are not without risks of addiction and potentially harmful side effects. The better way to treat pain is by targeting the actual physiologic issue rather than masking it. Again, this is a simple answer to what can be a complex issue, especially with people who have chronic pain issues. Even when the structure is intact, there are many more reasons why someone can experience pain. Sometimes it takes thinking outside the box to fix it.

Interventional pain management doctors are more accurately defined as non-surgical orthopaedists, who treat patients with a holistic approach, utilizing injections, therapies, and medications, rather than with a scalpel. This includes patients who are both non-surgical candidates and those who have had surgery several months to years ago, but still suffer with pain.

There are a wide array of injections and procedures to treat a gamut of pain issues, from herniated disks to Complex Regional Pain Syndrome (CRPS). Some procedures may be as simple as a single epidural injection, while some may be more complicated, such as a Spinal Cord Stimulator. Not all injections are the same; some are designed to reduce inflammation around a pinched nerve, while others are designed to decrease the sympathetic output. All such procedures are performed with fluoroscopy or ultrasound guidance, which allows visualization of the injection, making it more precise and safe for the patient. Opiates are extremely addictive and over time become less effective, hence making them more risky than beneficial.

If patients for whatever reason do not want an injection, they can still be treated with medications, therapy, and medical equipment. The most effective treatment plans include a team approach, with specialized orthopaedists, physiatrists and physical and occupational therapists all working together to find out where the patient's main pain generator is coming from, and determining the safest and most effective treatment for it. ■

Dr. Victor Tseng is an interventional pain management doctor with Sports Medicine and Orthopaedic Center. He is fellowship trained and Board certified in Physical Medicine and rehabilitation with specialization in Interventional Pain Medice. For more information, visit smoc-pt.com.

Three physicians in one – the vital role of the surgical dermatologist.

VIRGINIAdermatology™
& skin cancer center

The Virginia Dermatology & Skin Cancer Center was established by Dr. Brian L. Johnson, who began his medical training at the Uniformed Services University of the Health Sciences in Bethesda. His Navy medical career included service aboard the USS Yellowstone, the Kearsarge and the Iwo Jima. He participated in major deployments and field assignments with the Seabees and Special Forces.

He studied dermatology at Johns Hopkins, and completed a Mohs Surgery Fellowship at Northwestern Skin Cancer Institute in Chicago. He's a Fellow of the American Academy of Dermatology, American College of Mohs Surgery and the American Society of Dermatologic Surgery.

With such impressive credentials, it's hard to imagine that Dr. Johnson tried not to become a dermatologist. He always knew he'd go into medicine, but his father, Dr. Bernett L. Johnson, Jr., was a renowned Master Dermatologist, and he wanted something different for his own career. "I initially thought I'd go into orthopaedic surgery," he says, "but when I went into the Navy, I frequently dealt with patients complaining of back and knee pain, which are very subjective symptoms. I knew that I wanted to be in a field where the cause of a patient's symptoms were more objective or visual."

He considered the fields he could go into where he could make a difference in his patients' lives – and soon realized that was dermatology. "I already had a familiarity with it," he says, "and I knew that there were cases – like melanoma – where I could literally be saving someone's life."

He also realized the specialty was very diverse, explaining, "Within the specialty of dermatology, you can subspecialize. My father subspecialized in dermatopathology, which focuses on the study of cutaneous diseases at the microscopic level."

Dr. Johnson preferred the surgical aspect of dermatology, including the innovative subspecialty of Mohs Micrographic surgery.

Mohs micrographic surgery, a ground-breaking surgical procedure for treating skin cancers, was developed by Frederic Mohs, M.D. in the late 1930s. He developed the technique of removing skin cancers and looking at the margins at the same time. Dr. Johnson explains, " the procedure wasn't adopted by general surgeons because during those years, skin was considered a non-issue; if you weren't an internist or a general surgeon, you really weren't considered a true doctor." Dr. Mohs tried to publish his findings, but surgeons then weren't comfortable learning skin pathology and laboratory techniques, while dermatologists, who routinely treated skin cancers, embraced the procedure.

"Dermatologists picked up the technique and ran with it," Dr. Johnson says, "and over the years, we've refined it to the point where we can use local anesthesia, remove the cancers and evaluate the margins under the microscope while the patient is waiting. It's easier on the patient in many ways – notably, it completely eliminates the anxiety of having to wait days or even weeks for a biopsy report."

A typical Mohs surgery.

A patient presents with a skin cancer on the nose. After administering a long-lasting local anesthetic, Dr. Johnson makes an incision around the visible tumor. "We cut in a circle, so we're able to see the entire margin," he says. "You're always concerned when you're cutting out any cancer, that at the edges of the incision there is normal tissue. Mohs is the best procedure for getting clear margins."

He gives the tissue to his technicians, who freeze it, cut it thin and put it on a slide, where it's evaluated to determine if any cancer remains. Dr. Johnson's technicians are trained in the very specialized way Mohs sections must be cut: they use a machine called a cryostat, which cuts the tissue microns thin – so thin you could read a newspaper through it.

"When we evaluate the tissue, we look at it in a clock fashion," Dr. Johnson says. "We look at 12 o'clock, 3, 6 and 9 o'clock. If there's cancer left at any of the points on the clock, we go back to the patient and remove any remaining skin cancer and evaluate that to make sure it's clear." Only when Dr. Johnson is satisfied that all of the margins are clear, does he begin the exacting work of reconstructing the area where the cancer was removed. "If I have to cut a large hole in someone's nose, or on their ear or lip, we put that area back together so that they look close to normal and have minimal disfiguring scars." It's not just cosmetic: there's a practical purpose as well. If the cancer is on the eyelid or the lip, the surgeon wants to remove as little tissue as possible, so the patient can maintain normal function. Successful reconstruction and or cosmetic technique is based on a surgeon's skills and experience, not necessarily his or her specialty. Dr. Johnson has performed more than fifteen thousand Mohs surgical procedures and reconstructed over 95 percent of the wounds caused by the surgery.

Mohs surgeons are three doctors in one.

"We're surgical oncologists, cutting out cancers. Patients don't realize that dermatologists do more skin surgery than any other group of physicians," Dr. Johnson says. "We're also pathologists, reading slides to make sure all the margins are clear. And we're reconstructive surgeons."

From the patients' standpoint, that efficiency means everything is dealt with on the same day, sparing them the ordeal of waiting for pathology and follow-up appointments. The cost savings can be substantial, but many think the convenience and lessening of anxiety are even more important.

Dr. Johnson maintains a robust practice in the other areas of dermatology as well.

There are three aspects to dermatology, he says. Medical dermatology deals with skin cancers, rashes, acne and other diseases of the skin. Surgery involves all types of cancer: the more treatable basal and squamous cell cancers and the more lethal melanoma – and is not limited to Mohs: Dr. Johnson treats cancers on all areas of the body, performed with regular incisions and procedures. The cosmetic arm of dermatology involves patients who want to enhance their appearance through non-surgical cosmetic treatments. These include Botox or chemical peels for frown lines and wrinkles, fillers for volume loss in the face, laser treatments for veins, hair or acne scarring and skin tightening using the latest radiofrequency machine.

Dr. Johnson employs a staff of specially trained professionals who assist him in all aspects of his practice, which has recently expanded to a fourth location. Until recently the only physician on staff, Dr. Johnson was recently joined by Dr. Donald Shenenberger and Dr. Michelle C Walters, both Board certified dermatologists who work in Virginia Dermatology & Skin Cancer Center's Suffolk office.

Dr. Johnson remains convinced that he made the right decision years ago. He wanted to pursue a field that would make a meaningful difference in people's lives, and in dermatology, he found it. "Some forms of skin cancer can be fatal," he says. "Usually basal cells and squamous cells aren't, but even those, if left to continue to grow, can be very destructive and disfiguring. And melanoma is one of the deadliest cancers, probably more so than colon or breast cancer. It doesn't respond well at all to radiation or chemotherapy. With melanoma, as with any cancer, the best treatment is getting it removed as early as possible. We save lives when we do." ■

Dr. Johnson sees patients at four locations:

241 Corporate Blvd., Suite 215, Norfolk VA 23502 / 757.455.5009
12695 McManus Blvd., Suite 4A, Newport News VA 23608 / 757.369.0439
1005 Commercial Lane, Suite 230, Suffolk VA 23434 / 757.925.1860
1035 Champions Way, Suite 100, Suffolk VA 23435 / 757.967.0790

Or, for more information visit: virginiamohs.com
A new location in Norfolk will be opened in May 2015.

PROMOTIONAL FEATURE

Lymphedema Treatment Options With PT:

Complex Decongestive Physical Therapy

By Ken Morris, PT, DPT, CMTPT

Lymphedema. As clinicians, we know and understand what can happen when the natural drainage of the lymphatic system is impaired, often by cancer treatment, trauma or genetic predisposition.

We've seen patients suffer from fluid building up in their tissues. It's painful. They face a threat of infection. The pressure and stiffness often negatively impact their quality of life. And that doesn't begin to address how they generally feel about their appearance as their limbs swell from the fluid buildup. They do Google searches and read that it's something that may never go away. And it scares them.

But it doesn't have to. There may not be a panacea cure for lymphedema, but there are options that have proven results in helping patients manage the condition.

Physical therapy programs – specifically Complex Decongestive Physical Therapy administered by a licensed physical therapist – offer ways for patients living with lymphedema to keep the lymphatic fluid moving and get as close to living an active life as possible.

At the Tidewater Physical Therapy clinics that offering this treatment, we start with education, explaining exactly what lymphedema is to patients newly living with the condition, and why Complex Decongestive Physical Therapy can help them.

Lymphedema occurs generally in the arms and legs due to a blockage in the lymphatic system. It's caused when the normal drainage of fluid is hindered by a blockage or cut in the lymph nodes in the groin area or the

armpit. While sometimes hereditary, lymphedema is usually the result of blockages caused by infection, cancer and scar tissue from radiation therapy or the surgical removal of lymph nodes.

About a third of women whose lymph nodes are dissected during breast cancer treatment will develop lymphedema. A colleague recently shared the story of a young woman who conquered breast cancer, but ultimately developed lymphedema.

Physical therapy was not a treatment this patient thought she needed in her cancer recovery, but after utilizing Complex Decongestive Therapy for her limb swelling, she was able to return to her normal daily activities.

Physical therapists use a variety of methods to encourage lymph flow and reduce swelling. Once swelling decreases, we help patients take over their own care by creating a safe exercise program to do at home, providing tips for staying on a proper diet that will decrease fluid buildup in the tissues, and helping obtain compression garments to manage symptoms in the future.

Even if lymphedema doesn't develop after lymph node removal, a prescribed exercise program to improve one's overall fitness can minimize future risks.

As with every patient we work with, detailed and regular communication is maintained with physicians. Patients with poor heart, lung or kidney issues, and those with these issues combined with the effects of poor venous flow, can present like lymphedema. Ensuring all members of a patient's healthcare team are fully aware of developments is vital.

Early intervention is key to helping any swelling that develops from getting worse. ■

Ken Morris, PT, DPT, CMTPT is the Clinical Director of the Tidewater Physical Therapy Hidenwood location in Newport News. Physical therapists trained in lymphedema management are available at Tidewater Physical Therapy clinics in Newport News (Hidenwood), Smithfield, Norge and Norfolk (Kempsville). Learn more about Tidewater Physical Therapy at www.tpti.com.

Why not send your patients to Costco or Sam's Club to get hearing aids?

By Theresa H. Bartlett, AuD

After all, that's where they can buy beer, shrimp and tires. You probably already know the answer, but your patients may not. Here's an easy way to explain it to them, using that same beer, shrimp and tire analogy.

Purchasing a hearing aid is actually a lot like purchasing beer, shrimp or tires: it's not simply pulling any old brand off a shelf. People have a favorite beer, a preference for peeled shrimp and a car that only certain tires will fit. They can't buy any of those things without very specific information, for these products to satisfy a specific need (or desire).

Similarly, hearing aids must be compatible with someone's specific hearing loss. This requires precise assessment by a hearing professional. Hearing loss may or may not (and probably not) be accurately measured by a hearing aid dispenser.

Another thing patients need to understand: hearing aids aren't a quick fit or fix. Hearing loss occurs so slowly that most people aren't even aware it's occurring. Once it becomes significant enough for people to pursue amplification, it takes time to acclimate to all the sounds that their ears have been missing. After practicing for 20 years, I can tell you that most people expect to put hearing aids on for the first time and hear what they want to hear perfectly all the time. This is not practical; nor is it possible in most cases.

It takes the average person being told seven times in seven years that they have sustained hearing loss before they actually pursue amplification – that's at least seven years of living with hearing loss. To then put hearing aids on and have all sounds returned immediately can be quite overwhelming, which is why the majority of people put their hearing aids in a drawer, never to wear them again – because they've simply been overwhelmed by all the sound. That's where the Audiologist comes in.

It's the role of the Audiologist to correctly identify hearing loss and to make referrals to ENTs when appropriate. It's also the role of the Audiologist to educate patients about their hearing loss, and to explain why they're having the concerns they have. The Audiologist then helps guide them in selecting the most appropriate form of amplification for their individualized hearing needs. The Audiologist's role doesn't end with the fit; it continues for the life of the hearing aid. As Audiologists, we consistently monitor our patients' progress, educate their families on hearing loss and hearing aids, troubleshoot and fix hearing aids when there's a problem and monitor any changes in our patients' hearing.

Hearing aid dispensers at Costco or Sam's Club can't do that, anymore than they can select the right beer without knowing the drinker's preference, or fit tires without knowing what kind of car they're for. ■

Theresa H. Bartlett, AuD is a Doctorate Level Audiologist who currently owns and operates a small, private, Audiology practice in Norfolk, Virginia. Dr. Bartlett specializes in Lyric hearing products and will soon be a Golden Circle Audiologist for Sensaphonics hearing conservation products. www.virginiahearing.com.

Choroidal Melanoma Update

New treatments for the eye disease that can take lives as well as vision

By: Alan L. Wagner, MD and Kapil G. Kapoor, MD

It's well known that skin cancer is the most common of all cancers, and that melanoma, which accounts for only two percent of these cancers, causes a large majority of skin cancer deaths. Over the past twenty years, those cancers and deaths have increased between three and five-fold. It's less well recognized that there has been a similar increase in the incidence of melanoma of the eye and in its sequelae: from loss of vision to loss of life. Approximately 50 percent of patients with choroidal melanoma (also called uveal melanoma) will develop metastasis by 10 to 15 years after diagnosis.

These tumors are rare, and while we don't know the exact cause, we do know that individuals with red hair, fair skin and blue or green eyes are at higher risk; as, of course, are those with a family history of skin conditions like dysplastic nevus syndrome.

As with most cancers, early detection means safer, more effective treatment, and therein lies the challenge: in its earliest stages, choroidal melanoma is relatively symptom-free. The tumor doesn't cause pain or discomfort, and there are few visual cues. By the time the patient experiences symptoms, the disease is usually more advanced. These include blurred vision, flashing lights or shadows – the same symptoms that often beset patients over the age of 40.

Most melanomas in the eye are diagnosed during a dilated eye exam, using an ophthalmoscope and slit lamp. It's usually at this point that we see the patient, and we begin by measuring the tumor(s) with our unique scanning laser and camera that records in multiple wavelengths. We perform angiography, and when indicated, follow with CT, MRI or even PET imaging. It's critical to determine at the outset whether the melanoma has metastasized.

Once the diagnosis is confirmed, we work collaboratively with the excellent local oncologists to determine the best course of treatment for each individual patient. Today's modalities offer hope where little to none previously existed for eradicating the tumor, improving survival, and preserving sight.

For certain small tumors, we use transpupillary thermal therapy – TTT – a method of delivering non-ionizing radiation to the tumor, using a near-infrared laser, killing the cancer cells without harming the eye. If that fails to work, and for larger tumors, we use a form of brachytherapy, placing a small plaque embedded with radioactive seeds against the outside of the eye. The patient is then patched for five days before plaque removal. We've seen success in killing the tumors with this method in over 85 percent of cases.

Perhaps the most crucial message for patients is the importance of the annual, dilated eye examination.

Today, we're able to do genetic testing that can help us more accurately determine a patient's prognosis. Certain genetic mutations confer increased susceptibility to uveal melanoma metastasizing. There is ongoing and very exciting research and clinical trials being conducted in our clinic and others across the country that patients are being enrolled in if they're found to have higher risk changes, or if they show metastatic disease. Three or four years ago, we had nothing to offer these patients. Today we can gather much more information to help us determine the appropriate follow up and care.

Perhaps the most crucial message for patients is the importance of the annual, dilated eye examination. And because of the potential for conversion, the importance of close follow up cannot be overstated. If uveal melanoma is caught early and treated when the lesion is small, there are well-tolerated modalities that can save their vision – and their lives. ■

Alan L. Wagner, MD

Kapil G. Kapoor, MD

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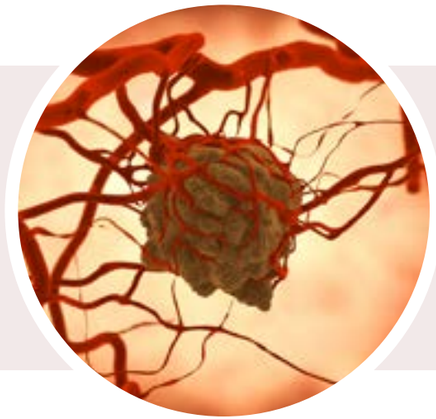


How Orthopaedic Surgeons Often Diagnose and Treat Primary Bone Tumors in Conjunction with Oncologists

By Boyd W. Haynes III, MD

An intact self-image is very important to healing from cancer, long-term rehabilitation efforts and a return to a normal life for the patient.

About once a month, I will see a patient in the office who presents with complaints of pain, swelling and stiffness in a limb or joint without report of a trauma. The patient may report a fever, night sweats or loss of weight. Sometimes, patients will just report some soreness in a limb, but mostly an overall sense of feeling unwell. As part of my routine orthopaedic work-up, I order diagnostic imaging of the painful area so that I can ascertain if the patient has a fracture, arthritis or some other boney malformation causing the discomfort. Upon review of the images, I locate what I suspect to be the cause of the problem - a bone tumor. The ensuing discussion with the patient will be difficult as they will be totally unprepared for the news that this tumor could be cancerous. For purposes of this article, I will focus on the treatment of primary bone tumors and not metastatic bone tumors.

After biopsy by an Oncologist and confirmation that the tumor is indeed malignant, I may see the patient back at a later date for surgery. Based on the treatment plan developed for the patient by the Oncology team, I may be called upon to remove all or part of the primary bone tumor. Depending upon the location, depth and size of the tumor, stabilization and strengthening of the bone with bone grafts, synthetic bone, rods and or plates may be required. If the tumor is in a joint, I will perform arthroplasty and replace the affected joint with a prosthesis where appropriate. This may occur before or after radiation therapy and/or chemotherapy.

Limb salvage techniques are always used, regardless of the long-term prognosis of the patient. I work very carefully to retain whatever musculoskeletal structure I can to preserve patient wholeness. An intact self-image is very important to healing from cancer, long-term rehabilitation efforts and a return to a normal life for the patient.

Amputation is absolutely avoided unless the tumor is extremely large, involves a major blood supply or there is no means of successfully salvaging the limb. Thankfully, the development of technologically-advanced prosthetic devices offer the promise of great utility and mobility to amputees that were unavailable even a few years ago. Physical and Occupational Therapy will play a vital role in returning the post-operative bone tumor patient to activities of daily living, to work and full-function, whenever possible.

Late-developing complications from this surgery are bone graft non-union, contractures, limb length discrepancies and loosening of implanted prosthetics, all of which are rare. Patients who have primary bone cancer removal surgery will need to follow up with their Orthopaedic Surgeon or Oncologist yearly for life and will need x-rays annually to confirm that their bone stabilization remains solid and no X-ray evidence of tumor return. These patients will also require antibiotic prophyllaxis before dental cleaning or other minor medical procedures. ■

Dr. Boyd Haynes is a Fellowship-trained, Board- Certified Orthopaedic Specialist who currently practices at Orthopaedic and Spine Center in Newport News, VA. Dr. Haynes has a fellowship in Sports Medicine and specializes in total joint replacement and endoscopic carpal tunnel repair. For more information on Dr. Haynes or OSC, please go to www.osc-ortho.com.

Professional Dissatisfaction in the Medical Office

The first in a series of articles about the challenges of practicing medicine

One of the functions of this magazine's Physician Advisory Board is to recommend medical topics and others areas of interest that *Hampton Roads Physician* should cover. Dr. Jon Adleberg suggested that we take a look at the ever-increasing level of dissatisfaction among practicing physicians, and the toll it might well take on healthcare in America.

We started doing some research, and were frankly surprised at the amount of reports and surveys readily available by doing a simple Google search – and equally dismayed by the statistics we found.

Five years ago, for example, a survey conducted by The Physicians Foundation found that 40 percent of doctors planned to drop out of patient care in the ensuing one to three years, either by retiring or seeking a nonclinical job. A 2012 survey conducted by Medscape/Web M.D. showed dissatisfaction among US doctors rising: an online questionnaire of 24,000 doctors representing 25 specialties reported that only 54 percent said they would choose medicine again as a career, down from 69 percent the year before.

In 2013, acting upon a request from the American Medical Association, the nonprofit research organization RAND compiled a 150-page report entitled *Factors Affecting Physician Professional Satisfaction and Their Implications for Patient Care, Health Systems, and Health Policy*. Among other reasons for professional dissatisfaction, the report concluded, was a common theme that physicians feel stressed when they see barriers preventing them from providing quality care.

And the 2014 Deloitte Annual Survey of US Physicians reiterated its 2013 finding that most doctors remain concerned about the future of the healthcare profession.

We wanted to find out if the experience of physicians in Hampton Roads mirrors those reported in these national surveys, so we reached out – first to the members of our own Advisory Board, and then to some of the physicians and practices we've profiled over the last two years.

We began with Dr. Adleberg, an ophthalmologist and retina specialist in private practice with nearly 20 years experience treating patients with severe vision problems. He's often required to administer intraocular injections when other modalities like drops and pills cannot treat the retina effectively. This is especially true in the case of wet macular degeneration, a chronic eye disease that's generally caused by abnormal blood vessels leaking fluid (or blood) into the region of the macula. Left untreated, it can cause permanent vision loss. "We doctors have to purchase these medications and then apply to the insurance company for reimbursement," he says.

A recent problem arose when, despite going through the pre-authorization process and obtaining approval for such an injection

Jon M. Adleberg, MD

Jeffrey R. Carlson, MD

Margaret Gaglione, MD, FACP

Paa-Kofi Obeng, Do

"Every minute doctors spend on the phone, navigating paperwork, meeting all these different requirements that no one could possibly keep track of – that's all time we're not able to spend with our patients."

– and receiving reimbursement – Dr. Adleberg received a letter from the carrier two months later, demanding that he return the $4,000 payment. The letter further advised that should he decline to do so, the money would be deducted from any future claims he submitted. His office staff, after several calls to the carrier to ascertain the reason for the denial, subsequently resubmitted the claim per their recommendation. It was rejected, again with no reason given.

That's when Dr. Adleberg got involved. He tried emailing and calling to no avail, and ultimately asked his Congressman to intervene. The claim was finally paid – but only after he'd spent 30 hours negotiating a frustrating bureaucratic labyrinth. "The carrier told us one thing, but failed to communicate that to their software. I felt that the insurance company didn't care two hoots about the claim, about me or about my patient," he says. "And honestly, if I weren't a solo practice, and it wasn't such a large amount, I probably wouldn't have bothered – but it was just too much."

In Dr. Adleberg's case, it wasn't a question of him or his patient not understanding the limitations of coverage, but that is often the source of much frustration on the part of both doctor and patient, says Dr. Jeffrey Carlson, an orthopaedic surgeon who joined Orthopaedic and Spine Center in 1999. "Our frustration as doctors is that patients too often get their information about healthcare coverage from a media article or something they see on television, rather than taking the time to investigate what they're really getting from their specific policy," he says. "Insurance is complex, and all policies are not equal." He's had patients who both need and want an MRI, and had to tell them that their insurance won't cover an MRI. "We have to go through this algorithm of how to get an MRI: the patients have to go through physical therapy; they've got to get a shot; I've got to give them medication," Dr. Carlson explains, "and then in three months, after all of that fails, then I can order the MRI that I knew they needed when they first presented."

Dr. Margaret Gaglione, an internal medicine physician in private practice, shares her colleagues' frustrations. Her office accepts 14 different major insurances, including Medicare and Medicaid. "There are so many different requirements, and each company pays for something different," she says. "One pays for one drug, but not another. Patients may have a very high deductible – or even if they have

a specific carrier, they may have a subset of that insurance that doesn't cover a drug I want them on." An example would be some of the newer diabetes drugs (incretins and glucosurics), which are physiologically so much better treatments because they don't cause weight gain, but they are of limited value to patients who have chosen very high deductible plans, or are on Medicare.)

For every one of these doctors, dealing with claims that have been denied has become a standard part of every day in the office. "Every minute doctors spend on the phone, navigating paperwork, meeting all these different requirements that no one could possibly keep track of – that's all time we're not able to spend with patients," Dr. Gaglione says. And of course, it's all time for which physicians aren't being paid.

It's not just the established physicians with years of practice behind them who are experiencing frustrations. Dr. Paa-Kofi Obeng, with Bon Secours Nansemond-Suffolk Family Practice, has been in practice a little more than a year. "I think the shock has been more the red tape you have to go through when treating a patient," he says. "You're sort of shielded from that as a resident; you don't have to deal with it." He's experienced similar problems attempting to get his patients the medications they need, when they need it. "More medications are being denied based on insurance guidelines, even though I know a particular medication is better for my patient," he says. "You feel like your being dictated to by an insurance company. They don't want to pay for the medication you prescribe; they want you to try another (cheaper) one, even though you know what they're suggesting isn't going to be effective for the patient." In a particular denial he's fighting, Dr. Obeng notes, the medication dictated by the carrier would have harmed his patient.

There's no class in medical school or fellowship that prepares physicians for the volume of administrative red tape that goes hand in hand with the practice of medicine, unfortunately. "I think they're trying to address that in medical education now," Dr. Obeng says, "but there wasn't for my class."

Whether or not such classes are introduced, each of these four physicians we spoke to said they went to medical school to learn the specific knowledge and acquired the technical prowess and medical expertise they would need to care for the patients who come to them for healing and cure.

It is their belief, expressed by Dr. Carlson, that the best treatment plan is made by the doctor who is actually treating the patient. ■

If you are a physician or medical professional who would like to share your thoughts or experiences about the challenges of practicing medicine in the 21st century – and especially if you have ideas or suggestions about solutions to these frustrations – we want to hear from you.
Please email our editor, Bobbie Fisher, at bobbie@hrphysician.com or call 757.773.7550.

BON SECOURS HEART & VASCULAR INSTITUTE

Providing the Full Continuum of State-of-the-Art Cardiovascular Care in a Patient-Focused Environment

By Alex Strauss

Left to Right: William Callaghan, MD; Ryan Seutter, MD and Robert Lancey, MD. Not pictured Marc Camacho, MD

Diseases of the heart and blood vessels remain the number one killer of men and women in the U.S. From coronary artery disease and valvular dysfunction to blood clots, arrhythmias and congenital heart defects, successful treatment often depends on the experience and knowledge of a team of professionals dedicated to heart health. Such a team now exists in the Bon Secours Heart & Vascular Institute, a comprehensive program that provides world-class, highly-personalized cardiovascular care to residents of Hampton Roads.

"We have a very patient-oriented program with the emphasis on focusing on what each individual patient needs," explains Robert Lancey, MD, MBA, cardiothoracic surgeon with Bon Secours Cardiovascular and Thoracic Specialists and Medical Director of the Bon Secours Heart and Vascular Institute in Hampton Roads. "It's a different mindset from many other heart centers. Heart care, in general, can tend to be very regimented. But here at Bon Secours, we address the needs of every patient personally, assessing their level of knowledge about the disease and providing them and their families with the highest level of care and service, even long after their procedure."

This personalized approach is made possible by a team of cardiologists, cardiothoracic surgeons, vascular surgeons, cardiac anesthesiologists, electrophysiologists, cardiac nurses, and support staff trained and experienced in all facets of heart and vascular care. The result of this level of specialization is not only a more personalized patient experience, but also better clinical outcomes.

The Bon Secours Heart & Vascular Institute features all of the components of a truly comprehensive program, including specialized cardiothoracic operating rooms, a cardiovascular intensive care unit, step-down telemetry beds, a cardiovascular recovery unit, an brand new electrophysiology lab, a non-invasive cardiac imaging center, and state-of-the-art digital cardiac catheterization laboratories located throughout Hampton Roads where doctors perform a range of groundbreaking (and often minimally invasive) procedures.

Off-pump heart surgery, mitral valve repair, biventricular pacemakers, laser lead extraction, cryoablation for atrial fibrillation, fenestrated abdominal aortic aneurysm grafts, mechanical thrombectomy, and new approaches to heart failure are among the innovations being offered through the Bon Secours Heart & Vascular Institute. These services, as well as some of the most advanced diagnostic techniques available anywhere, are provided at locations across Virginia.

All Bon Secours Heart & Vascular Institute heart patients receive extensive education, before and after their procedures, as well as customized nutrition advice, follow-up care, and cardiac rehabilitation. "Our broad focus on patients and their health is really what sets us apart from some other heart programs," says Dr. Lancey. "It is nice to be able to do a complex operation, but what we really want to do is make sure that our patients leave healthier and can maintain that health going down the road. The procedure is just the start."

Awards and Accolades for Bon Secours Heart & Vascular Institute

- Society of Cardiovascular Patient Care (SCPC) has granted accredited chest pain center status to the emergency departments at Bon Secours DePaul, and Bon Secours Health Center at Harbour View, and chest pain accreditation with PCI at Bon Secours Maryview Medical Center.
- 2014 American Heart Association Mission Lifeline Silver Plus Award for Bon Secours DePaul Medical Center
- 2014 American Heart Association Get with the Guidelines – Stroke Gold Plus Award for Bon Secours Maryview Medical Center
- The Bon Secours Heart and Vascular Institute at Bon Secours Maryview Medical Center has been recognized as a UnitedHealth Premium® cardiac specialty center for Interventional Cardiac Care and received a three out of three star rating.

Cardiac Surgery Advances at Bon Secours

Few devices have been as important to the advancement of cardiac surgery as the cardiopulmonary bypass pump, or the "heart-lung machine", which was first used on a human patient in the 1950s. By temporarily taking over the functions of the heart and lungs to mechanically maintain the circulation of blood and oxygen, "the pump" allows heart surgeons like Dr. Lancey to operate on a still, rather than beating heart. While this can be critically important, the pump is not without its problems.

"The heart-lung machine is a great device but it does tend to bring some trauma to the operation that makes it less than ideal for older or sicker patients," says Dr. Lancey. For this reason, Dr. Lancey performs both on-pump and off-pump or "beating heart" coronary artery bypass procedures. "During an off-pump operation, , we use specialized instruments, one of which is a suction cup that attaches to the heart and allows us to lift it up so that we can access all of the blood vessels," says Dr. Lancey. "A second device that looks like a two-pronged fork with

Robert Lancey, MD, MBA - Cardiothoracic Surgeon

suction cups is used to stabilize the area around the vessel. The first device allows us to visualize and the second to stabilize."

Dr. Lancey, who is Board certified in both thoracic and general surgery, completed residencies in both at the University of Massachusetts Medical Center and trained in heart transplantation at Harefield Hospital in England before joining the faculty of the University of Massachusetts where he helped pioneer off-pump heart surgery in the 1990s. Dr. Lancey joined Bon Secours in 2013 and today uses off-pump surgery on his most at-risk patients. Patients who undergo off-pump heart surgery tend to need fewer blood transfusions, have fewer heart arrhythmias, may leave the hospital sooner, and generally heal faster, returning to daily activities earlier.

Patients with leaking or stenotic mitral valves can also benefit from Dr. Lancey and his colleagues' expertise in mitral valve repair. Although the team is also experienced in valve replacement, choosing repair over replacement when feasible has been shown to result in better long-term survival, better preservation of heart function, lower risk of complications such as endocarditis, and less need for anticoagulant medication.

"The key to successful mitral valve repair is to really study the echocardiogram to get a clear mental picture of what the valve looks like and why it is leaking," says Dr. Lancey. "If you really understand what is going on, then, when you do go in, you will be able to expeditiously repair the malfunctioning segment and put in the cloth ring that that will help the edges catch the blood better."

Regardless of the type of surgery a patient undergoes, Dr. Lancey says the team is "very involved" in post-operative care. "A lot of folks just operate and send them home and that is it. But we see all of our patients a week after surgery and then 30 days later, and even call them at home during their recovery. We are very dedicated to making sure they stay healthy," he says.

New Treatments for Arrhythmias

In some cases, the problem that brings patients to the Bon Secours Heart & Vascular Institute is not as much structural as it is functional. When the issue is electrical in nature, it may be referred to electrophysiologist Ryan Seutter, MD. Dr. Seutter was originally trained as an electrical engineer.

"I dealt a lot with the electricity of other things so, when I became a physician, it just made sense to apply my previous knowledge of electrical engineering and electronics to the heart," says Dr. Seutter. Dr. Seutter earned his medical degree at the University of Minnesota Twin Cities Medical School, where he also completed an internal medicine residency. He was fellowship-trained in cardiovascular disease at Baylor College of Medicine and in cardiac electrophysiology at the University of Minnesota and is Board certified in internal medicine, cardiology, cardiac electrophysiology, nuclear cardiology and echocardiography.

As an electrophysiologist with Bon Secours Cardiovascular Specialists, Dr. Seutter works in three primary areas: pacemakers and ablations for arrhythmias, and defibrillators for atrial fibrillation. Bon Secours Heart & Vascular Institute offers the newest and most advanced types of pacing devices and defibrillators and new cryoablation technology to treat arrhythmias where procedural precision is especially important.

The first step in the targeted treatment of electrical dysfunction in the heart is a precise diagnosis. Dr. Seutter utilizes a highly-sophisticated tool called "heart mapping" to help him locate the source of electrical problems. "Heart mapping is like GPS for the heart," explains Dr. Seutter. "It is a procedure where we maneuver wires and catheters inside the heart to try to find where those areas of abnormal rhythm are coming from. That allows us to ablate or eliminate them."

For people with serious heart rhythm disorders, Dr. Seutter and his colleagues offer the latest advances in pacemaker technology – the biventricular device. Biventricular devices or biventricular pacemakers have 2 or 3 or even 4 lead wires that can be positioned in the right atrium, the right ventricle and the left ventricle for a more targeted treatment approach than previous generations of pacemakers.

"We offer a full range of different types of wires, which allow us to pace from multiple areas of the heart," says Dr. Seutter. "These devices give us a lot more flexibility in our treatment approaches, particularly for congestive heart failure." Biventricular pacemakers have been shown to improve the symptoms of heart failure in about half of patients who continue to experience symptoms with medication.

Sometimes, problems with electrical devices arise and a permanent pacemaker or implantable cardiac defibrillator needs to be removed. Endocarditis (infection), severe malfunction or blockages in the veins may be indications for removal. Unfortunately, Dr. Seutter says, removing these leads, is no simple process. "You have wires that run up through blood vessels inside the heart, so you can't just pull them out without doing damage," he says.

Ryan Seutter, MD - Cardiac Electrophysiologist

To minimize the risks and address the technical challenges of device removal, Dr. Seutter now utilizes laser lead extraction, a less invasive and more effective extraction option. "With laser lead extraction, the laser actually forms a sheath around the wire, allowing us to cut and free it up as we extract it. Not only does this minimize the risk of damage, but it allows the patient to avoid open heart surgery."

Advanced Vascular Treatments

Minimally invasive techniques are also a mainstay of Dr. Marc Camacho's practice. Dr. Camacho is a vascular surgeon with Bon Secours Vein and Vascular Specialists, where specialists offer the full range of advanced vascular procedures. A graduate of Virginia Commonwealth University with a medical degree from Dartmouth Medical School, Dr. Camacho completed a residency in vascular surgery at the University of North Carolina at Chapel Hill and has been a part of the Bon Secours Heart & Vascular Institute since 2013. One of his most notable new procedures – rare but potentially life-saving – is fenestrated endovascular aneurysm repair.

"Fenestrated endovascular aneurysm repair is a minimally invasive alternative to an open procedure for certain types of abdominal aortic aneurysms," says Dr. Camacho. "Where patients used to have to spend a week or two in the hospital and several weeks of recovery, with the fenestrated AAA graft, they can have the procedure and go home the next day."

Endovascular repair using the fenestrated stent graft is specially designed to treat "short neck" aneurysms which extend above the renal arteries. Typically, surgeons need at least a 15 mm "neck" below the kidney arteries to place a graft with minimal risk for type 1A endovascular leaks. In the past, patients without this space above their aneurysm were not even considered candidates for surgery.

Now, the FDA-approved fenestrated stent graft makes treatment possible with customized holes that accommodate the arteries. The success of the procedure, which is performed through two or three small groin incisions, relies heavily on advanced 3D imaging technology for correct placement of the holes.

"We start by creating a 3D model of the aorta and then essentially stretching it out into a straight line so that we can perform exact measurements and compare where each artery is in relation to the celiac artery," says Dr. Camacho. The measurements and CT images are sent to a lab in Australia to be manufactured. Three to five weeks later, the custom-made graft arrives and is ready for surgery. Although the average national time for this procedure is three-and-a-half hours, Dr. Camacho can typically complete it in three.

Blood clots, including deep vein thrombosis, are another common problem for vascular specialists at the Heart & Vascular Institute. Dr. Camacho and his colleagues use intravascular ultrasound to identify the precise anatomic reasons for a clot and determine the best ways to treat it. Many clots can be treated with clot-busting drugs, however, if

the reason for the clot is anatomic, Dr. Camacho may decide to place a stent.

If the decision is to remove a clot, removal is now easier and faster thanks to a new type of thrombectomy that does not necessitate an overnight hospital stay. The new AngioJet thrombectomy system at Bon Secours uses high-velocity, high-pressure saline jets to create a vacuum effect in the vessel. It can be used to treat native coronary arteries and peripheral vessels and is regularly used to remove clots from dialysis shunts.

"The AngioJet thrombectomy device essentially sucks up the clot immediately, rather than leaving a catheter in place for 24 hours, waiting for TPA to work," says Dr. Camacho. By reducing the amount of TPA needed to address a clot, the AngioJet can help patients avoid bleeding, one of the drugs most serious side effects.

Comprehensive Approach to Heart Failure

Interventional cardiologist William Callaghan, MD, a specialist in heart failure, is one of the Heart & Vascular Institute's newest physicians, having joined the Bon Secours Cardiovascular Specialists team in January of this year. Although he is new to the Institute, he is not new to the area, or to heart failure. A native of Norfolk, Dr. Callaghan attended medical school at Eastern Virginia Medical School and did his fellowship in cardiology at the Medical College of Georgia. He launched and managed a community heart failure clinic in Augusta, Georgia which earned a unique advanced heart failure certification and hopes to eventually do the same for heart failure patients in Hampton Roads.

William Callaghan, MD - Interventional Cardiologist

"Heart failure is very common," says Dr. Callaghan. "It can be caused by many things – cardiomyopathy, a series of heart attacks, a virus, hypertension, even diabetes." Regardless of the cause, the result is a heart muscle that is either too weak or too stiff to adequately circulate blood through the body. In addition to fatigue, symptoms can include congestion, swelling, and shortness of breath. If left untreated, it can lead to respiratory distress or kidney damage. Often, Dr. Callaghan says, heart failure cases are first diagnosed when a patient is hospitalized for something else.

"These patients may have been treated for bronchitis or some other problem a number of times and it is finally recognized when they are in for another problem," says Dr. Callaghan. Medications, including diuretics, beta blockers and angiotensin-converting-enzyme inhibitors are mainstays of heart failure treatment. But Dr. Callaghan says truly effective long-term management of heart failure requires the kind of comprehensive approach offered at Bon Secours.

"What we try to do is get patients to the point where they can recognize when their symptoms get worse and take action. If they pick up three pounds, we tell them to take an extra fluid pill. We train them to limit salt in their diet. We try to treat this gigantic thing in a sort of low-tech way. This requires a lot of education."

In some cases, the heart can be helped along in its work by a mechanical pump. A left ventricular assist device (LVAD) used to be seen only as a bridge to heart transplant, but improvements in these devices are allowing Heart & Vascular Institute doctors to use LVADs as destination therapy for some patients.

While it is not always possible to fully restore normal heart function in heart failure patients, Dr. Callaghan says it is almost always possible to slow down the progression of heart failure and improve quality of life. "It is really rewarding to see people turn around and begin to feel better," he says. "Many of these patients come in very sick."

Why Bon Secours?

While Bon Secours Heart & Vascular Institute physicians give a variety of reasons for choosing to work here, patient-focus is a recurring theme. Beyond the technology and the expertise, this patient-centered approach is demonstrated at Bon Secours in the form of heart healthy education, prevention and early detection efforts, careful post-procedural follow-up, nutritional counseling, patient navigators, rehabilitation and support groups, convenient locations and even same-day appointments in some cases.

"I really appreciate the more personalized approach that I am able to take at Bon Secours," says Dr. Seutter. "Our size and structure makes it possible for us to stay with patients and see things through from start to finish. At the same time, we are large enough to give patients the advantage of advanced technology."

Dr. Callaghan agrees, citing Bon Secours' commitment to follow-through as a big reason for his move. "What I enjoy most is getting to know patients and working with them over a period of time. This is really critical where heart failure patients are concerned."

"One of the great things about Bon Secours is that we offer everyone the best care, no matter what," adds Dr. Camacho. "We can offer any and all vascular surgery options, but I am never going to offer you a surgery that you don't need."

Bon Secours demonstrates its commitments to community heart health through heart disease prevention programs, free seminars and free community cardiac screening events held throughout the year. A new Heart Health Academy, launched by Dr. Lancey in 2014, provides three-hour sessions on heart-healthy choices for middle school students in Hampton Roads. The program features pre- and post-session tests, nutrition quizzes, pedometers for students, videos of open-heart procedures, and a heart-healthy lunch.

Marc Camacho, MD - Vascular Surgeon

Although the Heart Health Academy is aimed at students, Dr. Lancey says its message applies to everyone: Lifestyle changes can make a real difference in heart health, no matter when they are implemented.

"Obviously, a heart operation is a big event and it certainly catches peoples' attention," says Dr. Lancey. "But we encourage patients to see that event as the day they became a non-smoker, the day they changed their lifestyle, the day they changed their diet for good. Perhaps this is the moment in your life when you finally decide to start exercising. We are always excited to help a patient make that kind of positive change." ■

For more information call 889-CARE (2273) or visit bshr.com/heart

IN THE NEWS

APM Spine and Sports Physicians has launched an initiative focused on biologic healing. The Regenerative Medicine Center of APM Spine and Sports Physicians concentrates on therapies that assist the body in healing itself with as few pharmaceuticals as possible. The practice is employing innovative therapies that use concentrates of the body's own stem cells to promote healing.

Robert Lancey, MD

John Barrett

Bon Secours Leaders Appointed to Hampton Roads American Heart Association's Board of Directors. Dr. Robert Lancey, Medical Director of the Bon Secours Heart & Vascular Institute and surgeon with Cardiovascular and Thoracic Services, was appointed the 2014 Board President Elect. John Barrett, CEO of Bon Secours DePaul Medical Center has also become a board member.

Bon Secours Virginia Medical Group - announces the opening of Bon Secours Greenbrier Medical Associates in Chesapeake. The new practice offers residents quality primary care in a convenient location and meets the growing needs of the community.

Kate Brinn, MHA

Bon Secours Mary Immaculate Hospital - Kate Brinn, MHA, has been promoted to the position of Administrative Director, Operations and Ambulatory Services, for Bon Secours Mary Immaculate Hospital. She earned her Masters of Health Administration from Virginia Commonwealth University.

Bon Secours Mary Immaculate Hospital - Darlene Stephenson, BS, MS, has been promoted to the position of Chief Executive Officer for Bon Secours Mary Immaculate Hospital. She earned a bachelor of science degree from Longwood University and a master of science degree from Virginia Commonwealth University.

Darlene Stephenson, BS, MS

Bon Secours Heart & Vascular Institute now offers a new technique for helping patients' sternums heal after open-heart surgery. The leading edge technology could offer great benefits to patients, such as reduced pain and healing time."At Bon Secours Heart & Vascular Institute, we strive to provide compassionate, advanced care to our patients, "says Robert Lancey, MD, cardiothoracic surgeon at Bon Secours Maryview Medical Center.

Mayor Paul Fraim, City of Norfolk (left) and Bradley Prestidge, MD, MS, regional medical director for Bon Secours Radiation Oncology Services

Bon Secours DePaul Medical Center - Bon Secours DePaul Health Foundation hosted a sneak preview and fund development event for the Bon Secours Cancer Institute at DePaul. Mayor Fraim has gratiously agreed to serve as the honorary chair of the Foundation's capital campaign.

Bon Secours Cancer Institute at DePaul Treats First Patients on Dec. 15. The Bon Secours Cancer Institute at DePaul is the next step in Bon Secours' effort to address the fact that, during the 2007 to 2011 data collection period by the Virginia Cancer Registry, Chesapeake, Hampton, Norfolk, Peninsula, Portsmouth and Western Tidewater health districts had cancer incidence rates and mortality rates greater than the Virginia average. The Bon Secours Cancer Institute at DePaul was designed for physician collaboration and patient ease, and features treatment spaces that maximize convenience and efficiency for patients and families as well as for the physicians, nurses and health care providers.

Charmaine Rochester, DHA

Bon Secours Hampton Roads Health System proudly announces that Charmaine Rochester, DHA, Vice President of Finance, has been selected by Inside Business for its 2014 Women in Business Achievement Award. Dr. Rochester is being honored for making a significant impact on the healthcare industry and sharing her skills and knowledge with the local community. She earned her doctorate in healthcare administration (DHA) at Central Michigan University.

Bon Secours Hampton Roads Health System is proud to announce that Bon Secours DePaul Medical Center has Chest Pain Center Accreditation from the Society of Cardiovascular Patient Care (SCPC). Hospitals that have received this accreditation have demonstrated that they have a higher level of expertise in dealing with patients who arrive with symptoms of a heart attack.

Chesapeake Regional Medical Center recently announced the appointment of **Jeff Brillhart, MBA, CPA,** as its new Vice President and Chief Financial Officer. He is a certified public accountant with a master's degree in business administration from The College of William and Mary and a Bachelor of Science degree in accounting from Virginia Tech.

Jeff Brillhart, MBA, CPA

Chesapeake Regional Medical Center recently began using the Lutonix® 035 Drug Coated Balloon PTA Catheter (DCB) for percutaneous transluminal angioplasty (PTA), a minimally invasive procedure used to open blocked arteries in patients with peripheral arterial disease (PAD). CRMC is the only hospital in Hampton Roads to use this device.

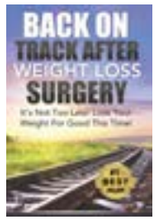
Mary S. Tindall

Chesapeake Regional Medical Center recently announced the appointment of **Mary S. Tindall** as the new executive director of the Chesapeake Regional Health Foundation. Tindall was selected for the position after a national search and brings more than 30 years of professional fundraising experience to the position. She earned a Bachelor of Arts in education from Michigan State University in East Lansing, Mich.

Chesapeake Regional Medical Center – The Sleep Center now offers pediatric sleep studies. "This is extremely beneficial for our community, as not many labs perform sleep studies on pediatric patients," said Vandana Dhawan, MD, medical director of Chesapeake Regional's Sleep Center and a sleep medicine physician. Pediatric sleep studies are performed on patients ages 5-16 and require a referral from a pediatrician.

IN THE NEWS

Children's Hospital of the King's Daughters has opened the region's first urgent care center exclusively for infants, children and teens in Chesapeake. Theresa Guins, MD, a Board certified pediatrician and pediatric emergency medicine specialist with 20 years of experience in CHKD's Emergency Department, will serve as Medical Director of the new service. Dr. Guins will lead a staff of Board certified pediatricians, pediatric nurses and pediatric X-ray technicians and lab specialists at the new center.



Dr. Thomas W. Clark – a leading expert on weight loss surgery has launched a new book "Back on Track After Weight Loss Surgery" and a Free 21 Day Weight Loss Challenge. His book is a collection of the top insights and strategies Dr. Clark has learned after performing over 4,500 procedures.

Jennifer Cowand

Jennifer Cowand of Sports Medicine and Orthopaedic Center (SMOC) is certified in the McKenzie Method. The McKenzie Method is a comprehensive approach to the spine that helps many patients suffering from neck and/or back pain. She has been with SMOC for over 15 years.

EVMS and Regent University signed an agreement that provides Regent students who meet certain criteria an early assurance of acceptance into one of five EVMS health professions master's programs The agreement allows EVMS to offer Regent's undergraduate students early acceptance into master's programs in Art Therapy and Counseling, Public Health, Surgical Assisting, Biotechnology, and Biomedical Sciences Research.

EVMS has received $560,000 in federal funding to study the origins of Type 1 Diabetes, research that may lead to ways to prevent the disease- researchers hope to develop a reliable biomarker that can identify people at high risk for developing Type 1 disease. That would allow for early intervention with medications to protect the beta cells and potentially prevent the progression of diabetes.

EVMS – Researchers at EVMS and Old Dominion University and Virginia Commonwealth University compared auto crash rates over two years in Chesterfield and Henrico counties. The adjoining counties in Central Virginia begin their high school classes nearly one and a half hours apart. Chesterfield County, where schools begin at 7:20 a.m., had a significantly higher rate of crashes among teen drivers than did teens in Henrico County where high schools begin at 8:45 a.m. "More and more data suggest that insufficient sleep is common in our teens and that early high school start times contribute to teens' reduced sleep," says Robert Vorona, MD, a sleep specialist and Associate Professor of Internal Medicine at EVMS.

EVMS - Researchers at Old Dominion University, Eastern Virginia Medical School and biomedical research firm OncoSec Medical, Inc., received a $585,000 grant from the Virginia Biosciences Health Research Corporation to study a novel gene therapy for malignant melanoma. Recent advances have improved overall survival, but the immunotherapy used in treatment — ipilimubab — has proven toxic and costly.

EVMS - CONRAD, a leading non-profit reproductive health program at EVMS, has launched the first-ever study testing an intravaginal ring engineered to provide contraception, as well as reduce HIV and herpes infections. CONRAD is a division of Obstetrics and Gynecology at EVMS in Norfolk, where it has laboratories and a clinical research center.

Dr. Brendan McConnell

Dr. Nelson Keller

Hampton Roads Orthopaedics & Sports Medicine physicians are excited to welcome the addition of Drs. Brendan McConnell and Nelson Keller of Colonial Foot Care to the practice. For more than 25 years, both specialists have provided high quality foot and ankle care to Hampton Roads residents. Dr. McConnell has been recognized by Hampton Roads Magazine in the "TOP DOCS" issue for several years. Dr. McConnell has been practicing foot and ankle surgery and podiatric medicine on the Virginia Peninsula since 1987. Dr. Keller is Board certified in reconstructive foot and ankle surgery and is a Diplomate of the American Board of Foot and Ankle Surgery and a fellow of the American College of Foot and Ankle Surgeons.

Timothy Hardy, MD

Dr. Timothy J. Hardy has been awarded ultrasound practice accreditation in the area of obstetrics and gynecology by the American Institute of Ultrasound in Medicine. Atlantic Obstetrics and Gynecology achieved this recognition by meeting rigorous voluntary guidelines set by the diagnostic ultrasound profession.

The Obici Healthcare Foundation recently awarded two grants totaling more than $600,000 to the EVMS Foundation to fund health-care projects that will serve the residents of Western Tidewater. "Igniting Change: Western Tidewater Healthy Faith and Communities Project" received a grant of $82,564 to develop strategies that create policy, systems and environmental changes that will result in more healthy food choices and physical activity in churches, public housing and community organizations.

A second grant of $553,363 was awarded to establish a Specialty Care Center that will focus on the detection, prevention and management of diabetes and its most common complications.

Jerry Nadler, MD

Jerry Nadler, MD, Professor and Chair of Internal Medicine, the Harry H. Mansbach Chair in Internal Medicine and Vice Dean for Research, has been elected to Mastership in the American College of Physicians (ACP). The designation is reserved for only a select few physicians deemed distinguished through the practice of internal medicine. The award will be presented in April 2015 at the ACP's annual meeting in Boston.

The New Hope Center for Reproductive Health is now offering the Eeva Test, the first and only FDA-cleared test to aid in embryo selection during in vitro fertilization (IVF). This breakthrough technology is an addition to the center's state-of-the-art lab and is designed to give clinicians a greater level of data when choosing embryos for transfer. It's a first for a Virginia fertility clinic and they are one of the first US clinics to incorporate the Eeva Test as another tool in advanced IVF fertility care.

Dr. Robin Poe-Zeigler and Dr. Christian Perez

Nancy W. Littlefield

Riverside Health System - Dr. Nancy W. Littlefield has joined Riverside Health System as Chief Nursing Officer and Senior Vice President. A Registered Nurse, she holds a doctorate of nursing practice from Old Dominion University, a master's of health care administration from Virginia Commonwealth University, a bachelor of science in nursing from George Mason University, and a diploma of nursing from Thomas Jefferson University.

Riverside and Old Dominion University have partnered to increase higher education among our nursing workforce. This partnership and concurrent enrollment program aims to help provide 80 percent of nurses in the workforce with a Bachelor of Science in Nursing by 2020.

Riverside Rehabilitation Institute (RRI) is pleased to announce that their Stroke Rehab Program was awarded Specialty Certification for Stroke Rehabilitation and maintains the Gold Seal of Approval™ for health care accreditation by demonstrating compliance and maintaining standards of patient care established by The Joint Commission (TJC).

IN THE NEWS

Riverside Shore Memorial Hospital - Site work preparation began in December 2014 on the new health care campus located in Onley, Virginia. In addition to the 136,000 square foot new hospital, a diagnostic center with a fixed MRI, a medical office building for specialist offices and the cancer center, the new health care campus should be completed by the end of 2016.

Riverside Health System Remembers Late Middle Peninsula Medical Director - For **Dr. Henry Rowe,** practicing medicine was an "art." That's what Bob Bryant, Senior Vice President for Riverside Health System's Lifelong Health Division said in a tribute video produced for Rowe's family and released to the public on the Riverside web site. Rowe first moved to Gloucester 39 years ago. He worked as a Medical Examiner in Gloucester and Newport News before becoming a Medical Director with Riverside's Lifelong Health division.

Henry Rowe, MD

Riverside Tappahannock Hospital has once again been named a *Top Performer on Key Quality Measures* by The Joint Commission, the leading accrediting body for hospitals and healthcare organizations across America. Four other Riverside facilities –Riverside Walter Reed Hospital in Gloucester, Riverside Regional Medical Center in Newport News, Riverside Behavioral Health Center in Hampton, and Riverside Shore Memorial in Nassawadox –were also recognized as *Top Performers.*

Samuel P. Robinson, MD

Dr. Samuel P. Robinson, at the Jordan-Young Institute, brings subchondroplasty to Hampton Roads. A minimally invasive outpatient procedure, it may reduce pain and increase function in patients with localized inflammation and stress-related damage to the subchondral bone of the knee. This new and innovative procedure not only provides a new option for treatment of knee pain but also does not limit future treatment options for patients experiencing osteoarthritis or knee pain.

Magaret Gaglione, MD

Tidewater Bariatrics offers a program, created by HMR Weight Management Services (HMR), that has been named the No. 2 Best Weight-Loss Diet in U.S. News & World Reports' Best Diets of 2015. The ranking was based on both short and long-term weight-loss ratings of the HMR Program that focuses on integrating diet, physical activity and healthy lifestyle skills through weekly coaching. Tidewater Bariatrics has offered the HMR program for seven years to Hampton Roads community members who are interested in losing weight. The HMR program is available in hospitals and medical centers or can be used by participants at home.

Tidewater Physical Therapy is pleased to introduce the following new clinicians.

Ryan Eastridge PT, DPT
Gloucester Courthouse

Ryan Shumate, PT, DPT
- Williamsburg

Brandon Conner, PT, DPT
Gloucester Courthouse

Becky Nea, PTA, CLT
Kempsville

Rachel Sileo, LPTA
Suffolk

Sherry Campbell, LPTA, CLT – Hidenwood

Rhonda Hubberstey, PT, MSPT – Executive Drive

Stephanie Rondeau, PTA, CLT – Norge

Samantha Freeman, LPTA

If you have News you would like to share with our readers in the spring edition, please contact the publisher at 757-237-1106 or email: holly@hrphysician.com Deadline for submissions is April 7th.

Dr. Rachel Armentrout has joined the CHKD neonatology department. Dr. Armentrout received her undergraduate degree at Johns Hopkins University and received her medical degree from Case Western Reserve University. She completed a residency in pediatrics and a fellowship in neonatal-perinatal medicine at Children's Hospital of Pittsburgh. Dr. Armentrout is Board certified by the American Board of Pediatrics.

Dr. Ayanna Butler-Cephas has joined the endocrinology department of CHKD. Dr. Butler-Cephas received her medical degree from the Rosalind Franklin University of Medicine and Science in Chicago. She completed a pediatric internship and residency at Advocate Hope Children's Hospital, followed by a fellowship in pediatric endocrinology at the Emory University School of Medicine. Dr. Butler-Cephas is Board certified by the American Board of Pediatrics.

Dr. Jessica DeLong has joined the staff of Urology of Virginia. Dr. DeLong earned her medical degree from Eastern Virginia Medical School in 2007. Both her surgery internship and urology residency were completed at the Lahey Clinic in Burlington, MA. Dr. DeLong completed her fellowship in Adult and Pediatric Reconstructive Urology at EVMS in 2014. She will see patients in the Devine-Jordan Center for Reconstructive Surgery and Pelvic Health, a division of Urology of Virginia.

Dr. Christine Franzese has joined EVMS Otolaryngology. Dr. Franzese received her medical degree from SUNY Upstate Medical Center in Syracuse, NY, her otolaryngology residency from Penn State/Hershey Medical Center in Hershey, PA. Dr. Franzese is Board certified by the American Academy of Otolaryngology Head & Neck Surgery.

Dr. Monique D. Gillman has joined EVMS General OB/GYN. Dr. Gillman received her medical degree at SUNY Downstate Medical Center in Brooklyn, NY and an OB/GYN residency at Hutzel Women's Hospital in Detroit, MI and is Board certified in obstetrics & gynecology. Her clinical interests include obstetric hospitalist, inpatient care and maternal medical complications of pregnancy.

Dr. Sameer Lapsia has joined the gastroenterology department of CHKD. Dr. Lapsia received her medical degree from the Boston University School of Medicine and completed a residency in pediatrics and a fellowship in pediatric gastroenterology at Stony Brook Long Island Children's Hospital. Dr. Lapsia is Board certified by the American Board of Pediatrics.

Dr. Lauren W. Mazzurco has joined EVMS Glennan Center for Geriatrics & Gerontology and is an Assistant Professor of Medicine. Dr. Mazzurco received her undergraduate degree at Hiram College in Ohio and completed her training in Osteopathic Medicine at the Ohio University Heritage College of Osteopathic Medicine in Athens, OH. She completed a clinical fellowship in Hospice and Palliative Medicine at the University of Michigan.

Dr. Lynnette Moore has joined the staff at Bon Secours Town Center Medical Associates in Virginia Beach. Dr. Moore is a Board certified family medicine physician. She received her bachelor of science in nursing from Howard University. She received her doctor of medicine from Morehouse School of Medicine and completed a combined family medicine and internal medicine residency at Eastern Virginia Medical School.

Dr. Kenneth F. More – Board certified in Medical Oncology, Hematology and Internal Medicine, has joined the staff at Virginia Oncology Associates. He has served the Hampton Roads military community since 2009. Prior to joining the Virginia Oncology Associates team, Dr. More was the Staff Medical Officer for Hematology and Oncology at Portsmouth Naval Medical Center, Portsmouth, VA. He has been published and contributed to multiple medical journals and publications.

Dr. Andrea Scharfe Nugent has joined the staff of Virginia Beach Obstetrics and Gynecology. She offers comprehensive obstetric and gynecologic care to women of all ages. She began her medical training at the Royal College of Surgeons in Ireland in 1994, and then completed her residency at The Johns Hopkins Hospital in Baltimore, MD.

Dr. Michelle Polan has joined the genetics department of CHKD. Dr. Polan received her medical degree from Akademia Medyczna in Poland and completed a residency and fellowship in radiation oncology in Bydgoszcz, Poland. Dr. Polan completed a residency in pediatrics from the University of Medicine and Dentistry of New Jersey, a residency in medical genetics at Nationwide Children's Hospital in Columbus, OH, and a fellowship in medical biochemical genetics at Children's Hospital of Pittsburgh. Dr. Polan is certified by the ECFMG.

WELCOME TO THE COMMUNITY

Dr. Travis Reeves has joined the practice of EVMS Otolaryngology at CHKD. Dr. Reeves attended Duke University School of Medicine and completed a residency in otolaryngology-head and neck surgery at the Medical University of South Carolina and a fellowship in pediatric otolaryngology-head and neck surgery at Children's Hospitals and Clinics of Minnesota.

Dr. Jeremy Saller has joined CHKD Surgical Group's orthopedic surgery practice. Dr. Saller attended medical school at the Texas Tech Health Science Center, where he also completed a residency in orthopedic surgery. Dr. Saller completed a fellowship in pediatric orthopedic surgery at Alfred I. DuPont Hospital for Children and is certified by the American Board of Orthopaedic Surgery.

Dr. Nelson Sarino has joined the staff at Bon Secours Town Center Medical Associates in Virginia Beach. Dr. Sarino is a Board certified family medicine physician. He received a Bachelor of Science in Medical Technology from Old Dominion University in Norfolk, VA and obtained a Doctor of Medicine from St. Georges University. He performed his residency at Virginia Commonwealth University Riverside Family Medicine Residency Program in Newport News, VA.

Dr. Ashley Schroeder has joined EVMS Otolaryngology. Dr. Schroeder received her medical degree from the University of Virginia Medical School and otolaryngology residency at the Naval Medical Center in Portsmouth, VA. Dr. Schroeder is Board certified by the American Academy of Otolaryngology Head & Neck Surgery.

Dr. Lynne A. Skaryak, a Board certified thoracic surgeon, recently joined Chesapeake Surgical Specialists. Skaryak earned her medical degree from Duke University School of Medicine in Durham, NC. She completed both her general surgery and cardiothoracic residencies at Duke University Medical Center. Skaryak is a fellow of the American College of Surgeons and a member of the Society of Thoracic Surgeons.

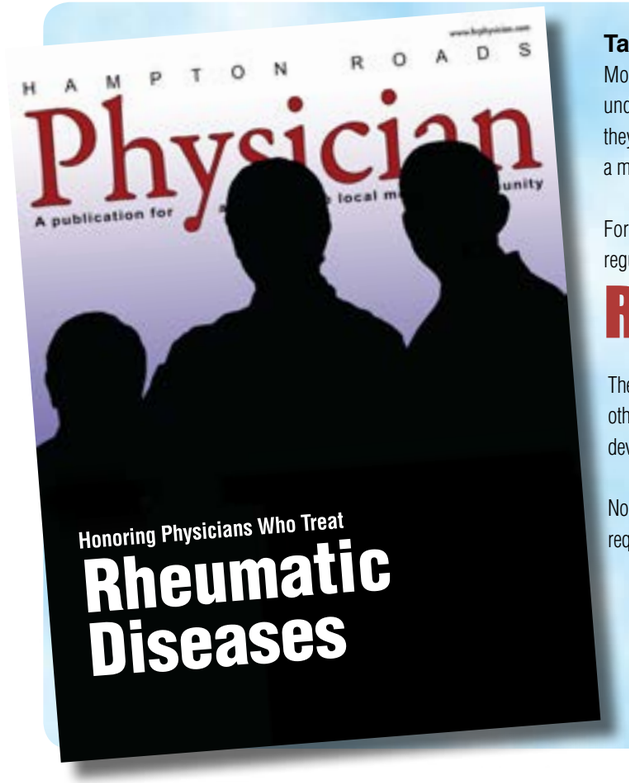
Dr. Lauren Smith has joined the CHKD allergy department. Dr. Smith attended the U.S. Naval Academy and received her medical degree from Eastern Virginia Medical School. She completed a residency in pediatrics at Children's Hospital of The King's Daughters followed by a fellowship in pediatric allergy and immunology fellowship at Duke University Medical School. Dr. Smith is Board certified by the American Board of Pediatrics.

Dr. Hakan R. Toka has joined EVMS Nephrology. Dr. Toka completed his medical degree at Humbolt University in Berlin, Germany. He completed an Internal Medicine residency at University of Massachusetts Medical Center in Worcester, MA. Dr. Toka is Board certified in Internal Medicine and Nephrology. Dr. Toka's clinical interests include hypertension, inherited kidney disease, kidney stones, chronic kidney disease, peritoneal dialysis and obstetric nephrology.

Dr. Gary Tye has joined CHKD Surgical Group's neurosurgery practice. Dr. Tye received his medical degree from the Medical College of Virginia, where he also completed a residency in neurosurgery. With a clinical interest in epilepsy, craniosynostosis, and tethered cord repairs and congenital spine disorders, Dr. Tye is certified by the American Board of Neurological Surgery and the American Board of Pediatric Neurological Surgery.

Kiniya Church, FNP-C, a Board certified family nurse practitioner, has joined the staff at Bon Secours Suffolk Primary Care. She earned her bachelor of science in nursing, bachelor of science in psychology and master of science in nursing, family nurse practitioner from Old Dominion University in Norfolk, VA. She is currently pursuing her doctor of nursing practice degree at Chatham University in Pittsburgh, PA.

Lorie A. Tengco Conza, NP-C has joined Virginia Dermatology & Skin Cancer Center. She is a Board certified family nurse practitioner through the American Academy of Nurse Practitioners Certification Program. She earned her Bachelor and Master of Science in Nursing from Old Dominion University in Norfolk, VA. In 1992, she enlisted in the Navy as a hospital corpsman then received a Navy ROTC Nursing scholarship in 1993. She served more than ten years as a nurse corps officer.



Taking Nominations for the Spring Edition

More and more, with the decoding of the human genome and our growing understanding of the interdependency of the body's systems – and how they respond to the disease process – caring for the ailing patient involves a multidisciplinary, team approach.

For our Spring 2015 issue, we're looking for physician leaders who regularly treat patients suffering any of the

Rheumatic Diseases

These include rheumatologists, orthopedists, pain management specialists and other specialized physicians – each relying on the others' particular expertise to develop the most effective treatment for the patient's individual case.

Nomination forms are available on www.hrphysician.com, or by emailing a request to holly@hrphysician.com.

Deadline for Nomination Submissions – March 2nd

WELCOME TO THE COMMUNITY

Tim Hatt, PA-C, a certified physician assistant, has joined the staff at Bon Secours Monarch Medical Associates. Before receiving his master of physician assistant degree from Eastern Virginia Medical School in Norfolk, VA, he worked as a nurse aide in the Neonatal Intensive Care Unit at the Children's Hospital of The King's Daughters, in Norfolk, where he also spent several years as a child life volunteer. He is a member of the American Academy of Physician Assistants and Virginia Academy of Physician Assistants.

Whitnei Saunders, FNP-C, a Board certified family nurse practitioner, has joined the staff at Bon Secours Suffolk Medical Associates. She received a bachelor of science in nursing from Norfolk State University in Norfolk,VA and obtained her master of science in nursing from Hampton University in Hampton, Virginia.

Patricia Nelson, FNP-C, a Board certified family nurse practitioner, has joined the staff at Bon Secours Greenbrier Medical Associates. She received a bachelor of arts from Virginia Tech in Blacksburg, Virginia, and a bachelor of science in nursing from Old Dominion University in Norfolk, VA. Continuing her education at Old Dominion University, she went on to receive a master of science in the family nurse practitioner program.

Helene A. Newman, PA has joined The Group for Women. She was awarded a Masters of Physician Assistant from EVMS and also received a Bachelor of Science in Biology from Old Dominion University. She is a member of the American Academy of Physicians Assistants and is a Certified Physician Assistant.

Ashley Resavy, FNP-C, a Board certified family nurse practitioner, has joined the staff at Bon Secours Medical Associates. She received a bachelor of science in kinesiology from the University of Maryland, as well as a bachelor of science in nursing from Johns Hopkins University School of Nursing. She completed a master of science in nursing at the University of Maryland School of Nursing.

The Future of Healthcare

By Alex Strauss

Driving "Meaningful" Patient Engagement

A central aspect of the restructuring taking place in American healthcare is a greater emphasis on patient engagement in the care process. The idea is that, if patients take more responsibility for their own health and are more involved in their care, they'll reduce their risk of chronic diseases, stay healthier, rely less on expensive services like the Emergency Room and healthcare costs will naturaly decrease.

One of the primary ways providers are driving this (mandated) cost-saving engagement is through the use of electronic patient "portals" that integrate with each organization's Electronic Medical Records (EMR) system and allow patients to interact with providers via the Internet. As providers get closer to the deadline by which they must demonstrate that their patients are actively using – and benefitting from – these systems, we checked in with five local healthcare organizations to see where they are in the process.

"We believe that this is the future of healthcare, this ability to collect data and proactively look at developing best case practices and protocols." – James Lind, Jr., EVMS Medical Group

The Limits of Patient Portals

Riverside Health System has been involved in the EMR revolution almost since the beginning. But like other early implementers of electronic medical records, they were also quick to discover one of the biggest limitations of the technology.

"Some of the systems, even now, are still very much fragmented or inconsistent," says Riverside President and CEO Bill Downey, whose organization includes 550 providers across almost all primary and specialty care areas. "There is not a truly integrated health record that goes through the physician office through the emergency room, lifelong health, nursing homes, home health, etc."

To address the problem, Riverside is working on an internal health information exchange, a sort of system-wide version of ConnectVirginia, the state's HIE. "This would allow information about a patient's recent Emergency Room visit to be easily accessible to the family practice physician who sees them a few days later," says Downey. Riverside is using a patient portal they call "My Health eLink" to give patients online access to a record of their visits and test results as well as the ability to request prescriptions and appointments. More than 72,000 people have signed up to access the portal so far and the organization has a goal of 100,000 by 2015.

"Some of the systems even now, are still very much fragmented or inconsistent." – Bill Downey, President & CEO, Riverside Health System

"This is a critical part of patient engagement," says Downey. "They need to know when they are due for certain tests, remind them with portal connection, which provides information to help them with their health."

Meaningful Use for Big and Small

"I think the ability for patients to access health information online is wonderful," agrees David Bernd, President and CEO of Sentara Healthcare, the area's largest provider. "The more they can learn and the more they can access the Internet, the better. Patient engagement is very important."

Sentara is driving patient engagement with "MyChart" a multi-functional portal that also provides full access to charts and tests, as well as appointment booking. More than 150,000 people have enrolled in this portal, a figure which has helped put Sentara among the top systems nationwide for attesting to Meaningful Use. While many providers are still working toward Stage 2, Bernd says seven Sentara facilities have already attested to Stage 7, which includes, among other things, active online patient engagement with their provider.

Michael Kerner, CEO
Bon Secours Hampton Roads

Peter Bastone, CEO
Chesapeake Regional Medical Center

"The first two stages of Meaningful Use were not that difficult. Now the challenge will be getting people engaged with it." – Peter Bastone, CEO, Chesapeake Regional Medical Center.

At the same time, smaller organizations, like the 310-bed Chesapeake Regional Medical Center, struggle with the investment of an EMR as they cannot spread the cost among many facilities as a larger health system might do. Though the process of the EMR implementation may be costly, it offers numerous benefits to patients and the institution.

"As an independent hospital, the implementation of our EMR has been beneficial and challenging at the same time," says CRMC CEO Peter Bastone. "We are still working through the effects of a rocky implementation but have recognized the benefits of an electronic system such as improved security and privacy and enhanced patient safety with built-in alerts and cross checks." Bastone sees the potential for reducing human errors as one of the benefits to a fully-functional EMR system.

"We were successful in completing the first few stages of Meaningful Use, but are now focused on engaging our patients. We've launched a secure, web-based Patient Portal allowing patients access to their records and active participation in their care, but we need to increase that engagement."

EMR: A Two-Way Street

EVMS Medical Group CEO James Lind, Jr., says the providers of the future need to view their EMR as a two-way street that not only encourages better patient engagement with their own care but also provides data that clinicians can use to improve the care they give. "We believe that this is the future of healthcare, this ability to collect data and proactively look at developing best case practices and protocols and embedding them in your EMR so that they help your physicians utilize these things," says Lind.

Diabetes is one example. Thanks to data collected by the EMR, diabetic patients treated by EVMS physicians now get follow-up calls and reminders to help them stick to the health advice they got from their doctor. Likewise, any EVMS doctor accessing the EMR can easily see when patients last had recommended tests, what the values were, when they are due for eye exams, etc. "Physicians can then use this information to provide exactly what that patient needs, when he needs it," says Lind.

While everyone agrees that EMR use is costly, Bon Secours Hampton Roads CEO Michael Kerner says these systems will ultimately save hospitals money by reducing things like readmissions and hospital acquired infections for which providers are penalized. "This comes from care management, interfacing more with the patient and family," says Kerner. Kerner says using the EMR to simply record a patient's condition when he/she enters the hospital, and monitor health changes that take place after he/she leaves via the portal, can go a long way toward improving care and getting good outcomes.

"Our EMR system gives us much better ability to monitor a patient's situation," says Kerner, who has used the "My Bon Secours" patient portal himself, to monitor and improve his own health. "I think it is a good thing for patients to have access to this kind of data. Patients don't necessarily take ownership of their own health, so a lot of it is educating people about a few of the things they can change."

The Need for System Integration

Although their organizations are all using EMRs and patient portals to a greater or lesser degree, local healthcare leaders say these systems and their portal functions can only go so far to ensure that critical medical information is accessible to any provider the patient sees. Because the different EMR systems cannot easily communicate with each other, several CEOs say they are hopeful that a tech company like Apple, Google, or Yahoo will enter the arena to devise a truly universal system for integration.

For now, there remains much uncertainty as to whether such a thing is even technologically possible. Even if it is, healthcare executives say the cost in time and money of simply implementing and maintaining their own individual EMR systems and patient portals is high enough. The state's HIE, ConnectVirginia, allows some limited exchange of critical information between providers, but a truly integrated EMR system – and patient portal that can make full use of it – may be in the distant future, at best.

When our series on The Future of Healthcare continues... EMR isn't the only source of rising healthcare costs. From strategic partnerships and mergers to a clinically integrated care network, we'll take a look at what healthcare providers in our area are doing to save money, provide value, and keep their budgets in the black. ■

James Lind, Jr., CEO
EVMS Medical Group

Bill Downey, President and CEO
Riverside Health System

David Bernd, President and CEO
Sentara Healthcare

Documenting
Your ACA Size for 2015

When it comes to the new burdens imposed by the Patient Protection and Affordable Care Act (ACA), employer size makes a huge difference: only large employers (see definition below) are subject to the employer mandate to offer adequate and affordable health coverage to full-time employees or face significant penalties. In addition, only large employers face extensive new information reporting requirements (Form 1095-C).

ACA size is based on the average number of full-time (FT) and full-time equivalent (FTE) employees during the prior calendar year. Under a special rule for 2015 only a mid-size category was created to offer an additional year delay in imposition of large employer penalties.

For calendar 2015, all employers will fall into one of the following size categories based on the 2014 average FT and FTE number:

Small – fewer than 50, exempt from the employer mandate, penalties and reporting

Mid-size – 50-99, exempt from penalties but not reporting

Large – 100 or more, subject to employer mandate, penalties and reporting

What records or documentation should an employer create to prove its size for 2015?

1. Employers who issue 49 or fewer 2014 W-2s should simply retain copies of the W-2s and W-3 to substantiate their small status for 2015 since there is no possibility they could have averaged more than 49 FT and FTE employees in 2014.
2. Employers who issue 150 or more 2014 W-2s are almost certainly large for 2015 unless they have very high turnover or can qualify as small under the seasonal business exception.
3. Employers who issue between 50 and 150 2014 W-2s should go through the size calculations to document their exact size for 2015 as follows:
   a. Create a spreadsheet with columns for each calendar month of 2014;
   b. Enter the number of hours of each employee who worked at all during the month;
   c. Sort the hours from most to least and draw a line at 130 hours.

   Count the number of employees with 130 or more hours (actual full-time employees).
   d. For employees between 121 and 129 hours, substitute 120 hours for the actual number.
   e. Add all the hours for all employees below 130 hours, divide the total by 120 and carry the result to two decimal places (FTE employees).
   f. Add the number of actual full-time employees (step d.) and the number of full-time equivalent employees (step f.) to determine your ACA size number for that month.
   g. Add the 12 monthly numbers, divide by 12 and round down to the next whole integer. If the average is 49 or less, you're a small employer for 2015. If it's 50-99, you're a mid-size employer for 2015 (with conditions).

Special rule: in calculating your average number for 2014, you're not required to average all 12 calendar months, but can use any six or more consecutive month period (28 possible combinations), so keep trying until you find a number that you like.

John M. Peterson is Of Counsel and a member of the Healthcare, Employee Benefits, Business Taxation, and Labor & Employment practice groups at Kaufman & Canoles. John has over 41 years of experience as both a practicing attorney and CPA in the areas of retirement plans, employee benefits and most recently the Affordable Care Act. He can be reached at (757) 624.3003 or jmpeterson@kaufcan.com.

Dr. Jayaraman Venkatesan
Cardiologist

Dr. Jayaraman Venkatesan is a board-certified physician who specializes in treating cardiovascular diseases using noninvasive, invasive and interventional procedures. In addition, Dr. Venkatesan specializes in nonsurgical endovascular treatment of peripheral arterial disease (PAD), including acute and chronic limb ischemia. Along with being a primary service provider, he offers second opinions for patients recommended for amputation.

MEET YOUR NEW NEIGHBOR

Amparo Halecki, board-certified nurse practitioner, and Dr. Venkatesan, join **Bon Secours Cardiology Associates.**

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