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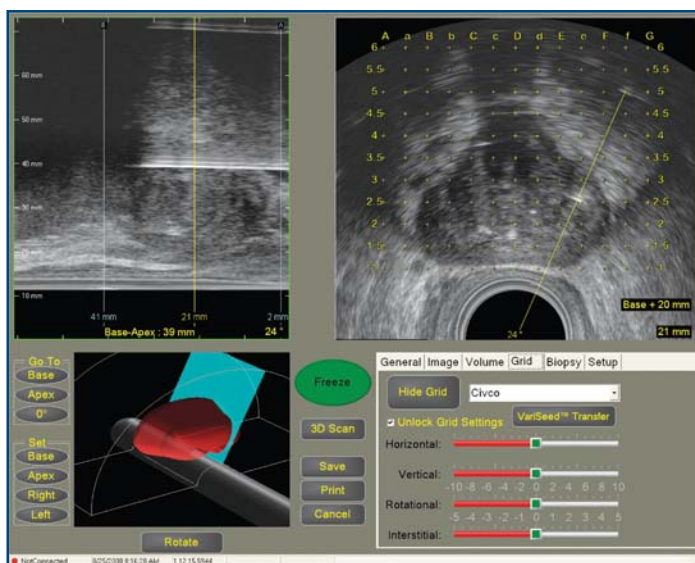
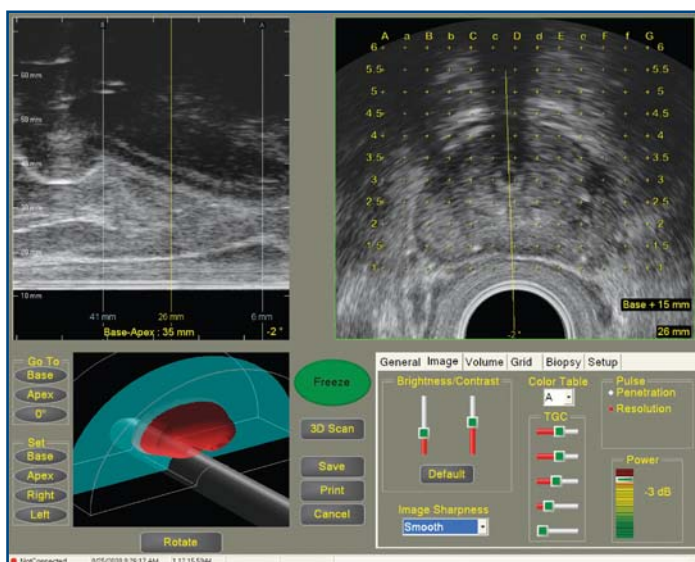
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ASTRO news

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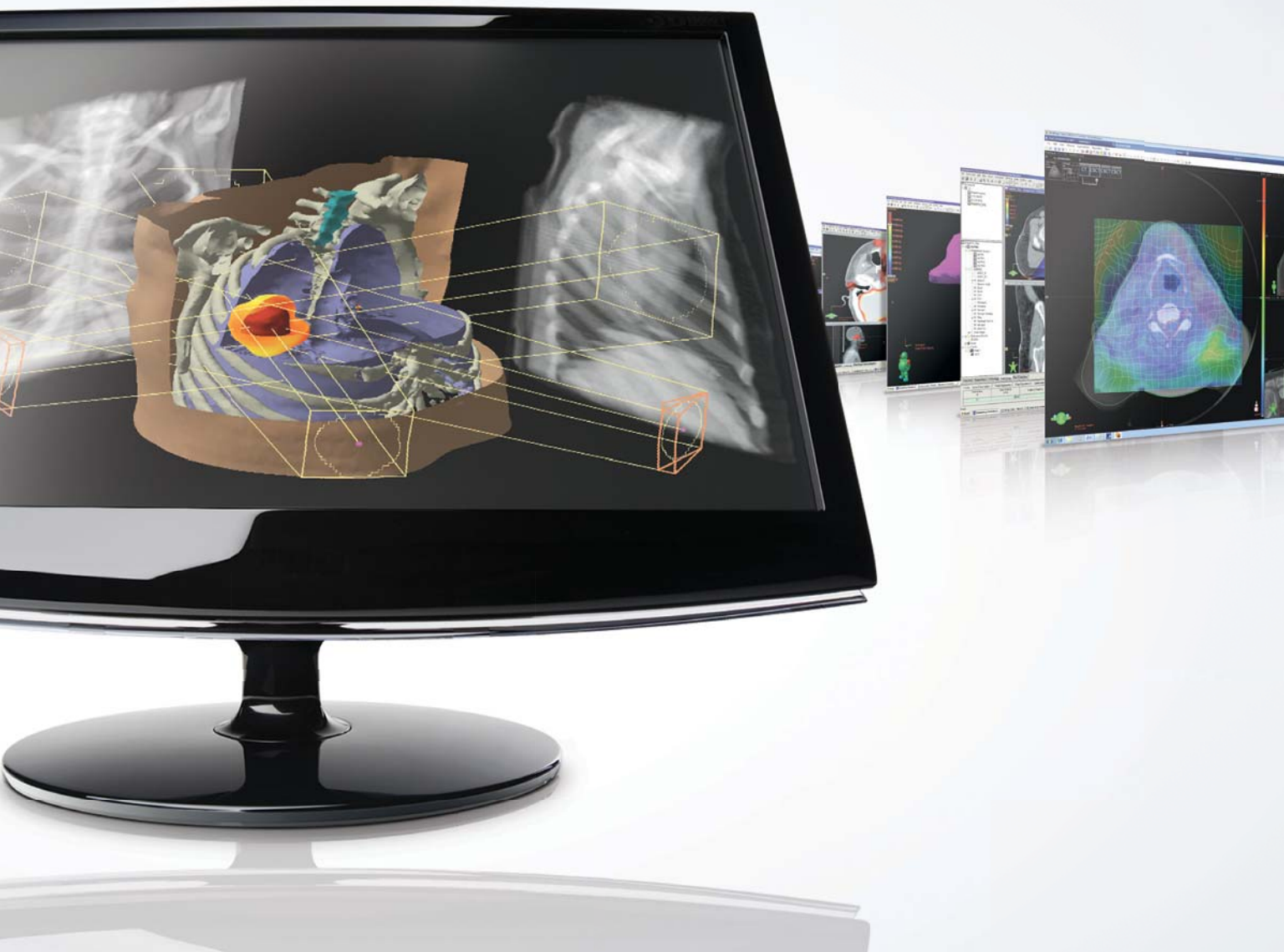
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HANDS ACROSS THE WATER

IF YOU'VE BEEN READING US online or via hard copy, you know that *ASTRONews* has long been an advocate of stirring the pot to highlight the bigger picture. This edition is a carefully selected sampling of our members' experiences—your partners and colleagues—who have exited their personal comfort zones and sought to do more. These articles are intended as shared experiences and as ruminations for contemplation by our readers.

Radiation oncology has long been a data-driven specialty that thrives on numbers—local control rates, disease specific survival and statistical significance, not to mention numbers like D90, V20 and alpha/beta ratios. More fundamental, but perhaps more mundane, numbers to an oncologist are the incidence and mortality associated with cancer. Most of us can “ballpark” the rates for common cancers in the U.S.—200,000-plus annual cases of breast cancer, for instance. And even in the face of the inherent problems with the cost of health care in general, and specifically cancer care, we have an impressive array of technology at our disposal for screening, diagnosing

and treating virtually every imaginable malignancy.

Now, try to imagine a world in which there are significantly more cases of cancer with *none* of the aforementioned technology at hand. *This* is the reality of cancer care in developing countries.

Many of you have been on medical missions to distant, often dangerous, places to provide basic medical treatment for common ailments such as hypertension, GERD, mystery rashes and diarrhea, or more parochial problems like malaria or parasitic disease. Still others have leveraged their radiation oncology training and traveled far and wide to share that knowledge. These clinical encounters are usually brief and impersonal, often communicating through an interpreter, and frequently unsatisfying when the doctor realizes that every patient has the same diagnosis—poverty—and that the solution is not in a pill or kind words. Screening for cancer, let alone treating it, is usually not on the “to do” list.

The problems with cancer care in developing countries are multifocal. First, there is the simple issue of supply and demand. A 2003 publication by the International Atomic Energy Agency, *A Silent Crisis: Cancer Treatment in Developing Countries* (www.iaea.org/Publications/Booklets/TreatingCancer/treatingcancer.pdf), attempts to answer this most basic question. It cites an expected five million new cases of cancer annually in the developing world with a need for (at least) 5,000 cobalt or linac units, with roughly 2,200 units available for treatment. The overall

We all have charities that strike our fancy, collar our attention and extract our commitment, whether that commitment is the actual delivery of health care or the dollars needed to support that effort. Don't be intimidated by the moment: embrace it!

incidence is expected to swell to 15 million cases by 2015. By comparison, the U.S. expects roughly 1.6 million cases in 2013 with more than 580,000 deaths.

Data from the International Agency for Research on Cancer GLOBOCAN 2008 estimated 12.7 million cases of cancer worldwide with 7.6 million deaths. More than 50 percent of the new cases and deaths occur in the developing world. Lung cancer, not surprisingly, is the most common cancer in men, with breast cancer the most common in women. Not unexpectedly, lung cancer causes the most deaths worldwide, but this can vary by country. There are some stunning differences, however, in some sites such as cervical cancer. In the developed world, Pap smears have made an enormous difference in the early detection and treatment of cervical cancer. Approximately 12,000 cases will be diagnosed in the U.S. in 2013 with a little more than 4,000 deaths. The comparable death rate in developing countries is a staggering 200,000-plus. This, my colleagues, is simply unacceptable.

The Association for Residents in Radiation Oncology (ARRO) has recognized the glaring need for improving healthcare and has formed the Global Health Initiative (GHI). The GHI was started by Luqman K. Dad, MD, in 2010 to help address some of the inequities in developing countries' health care. The Global Health Scholars Program was developed in 2011 to award three senior radiation oncology residents \$1,500 grants to travel to a developing country for a month or more to participate in a project of their own planning (see "Lessons In Global Health" on page 18).

So now I ask you to walk-the-walk and talk-the-talk. What can you, the attending physician, do to enhance global health care? This edition of

ASTROnews provides several snapshots of member experiences in developing countries (see "International Impact" on page 14) and represents, I suspect, only a fraction of the good that is done by our members for the periphery of society both at home and abroad.

My own journeys have varied from deworming and clean water expeditions in the Haitian Central Plateau to daily clinic encounters at the epicenter of the 2010 earthquake in Léogâne. The moment changes ... and still remains the same. There are hundreds of NGOs (nongovernmental organizations) devoted to health care in developing countries, as well as innumerable churches that coordinate mission trips several times a year. The opportunities are endless. All you have to do is ask.

We all have charities that strike our fancy, collar our attention and extract our commitment, whether that commitment is the actual delivery of health care or the dollars needed to support that effort. Don't be intimidated by the moment: embrace it! We're more than radiation oncologists. We're doctors! We have an abundance of knowledge to be shared. I speak as an individual, not solely as the editor of this publication. The opportunities to help the poor of the world with cancer care are all around you. Find your comfort level, but don't ignore the larger picture. The great religious texts of the world—there are several dozen—mostly agree that service to the poor is an inherent duty of mankind. Perhaps the author(s) of the Old Testament Book of Proverbs said it best: Proverbs 2:6 "... He who shuts his ear to the cry of the poor will himself also call and not be heard ..."

Dr. Eichler is the medical director of radiation oncology at the Thomas Johns Cancer Hospital in Richmond, Va. He welcomes comments on his editorial at astronews@astro.org.

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PAYMENT REFORM AND WISHFUL THINKING

have experienced both unprecedented growth in the expenditure for our services, as well as a substantial increase in the cost to deliver that care. Perplexingly, the way our existing payment system is built and responds to these currents of change may at times be both inequitable and contradictory, putting patients and providers at risk.

For instance, the payment system's response to rising outlays for radiation oncology care is to employ various screens and metrics, such as growth in utilization, which are then used as rationalizations for cutting payments within the Medicare Physician Fee Schedule for radiation therapy care. In this circumstance, a health care provider's efforts to maintain and improve quality and to deal with the real increased cost to deliver care and the needs of the patient are often forgotten because our health care delivery system is entangled and preoccupied in the debate about our federal budget deficit.

Just last year radiation oncology felt the effects of the collision of the realities of the cost to deliver radiation oncology care and the federal budget crunch when IMRT and SBRT were once again targeted for substantial, draconian and unsustainable cuts. In this latest case, we were able to chal-

lenge the justification for the ill-advised cuts and ostensibly maintain—for the time being—the valuation inputs for these treatment procedures.

But, make no mistake about it—radiation oncology was put on notice. Not only was the valuation of our work put under scrutiny, but the descriptions of many of our high-volume codes were also called into question. An unprecedented 23 radiation oncology CPT codes were designated by the Centers for Medicare and Medicaid Services (CMS) in the Federal Register as “up for immediate review,” including all of our treatment delivery codes. Our specialty was left with no choice but to respond.

We are entering a time of transition. Change is in the air. The fee-for-service payment system that allowed our specialty to grow and blossom while supplying access to needed care for our patients is evolving toward a value-based system set up to address issues of quality and cost as well as notions of patient centeredness. At the same time, the new payment system seeks to prod the provider to take responsibility, and even the risk, for the cost as well as the outcomes of treatment. Some say this approach will not be sustained, will go away or, for some reason, radiation oncology will be different and we will somehow be excluded from the emerging payment system reform.

These naysayers have advocated and even demanded that ASTRO should not directly respond to the specific CMS mandate addressing our

AN OXFORD DON ONCE SAID, “Change is good ... but no change is better.” Attitudes towards change are sticky. It is human nature to hold on to our ideas about our current circumstance with tenacity. For example, when we are offered new ideas or concepts about how to deliver care or how that care should be valued, although we might consider new palatable alternatives, our reflex is to revert to strong arguments as to why change is not a good idea.

For radiation oncology, the reality is that for more than a decade we

How we approach and engage this value proposition in health care should be seen as crucial to our future identity and ultimate role in caring for the cancer patient.

radiation oncology codes. Some have proactively proposed “solutions” to our complex dilemma cloaked in payment reform lingo packaging current or past fee schedules into radiation oncology-only payment bundles. As enticing as these approaches may seem to some, in this time of tectonic change, such courses of action are examples of an exercise in “wishful thinking.” This kind of wishful thinking is understandable. In fact, it is human nature. But, it shrinks away from the challenge at hand and our opportunity as health care providers to take a meaningful and substantive role in health care reform. If that weren’t enough, our credibility as a specialty is at stake over this issue. How we approach and engage this value proposition in health care should be seen as crucial to our future identity and ultimate role in caring for the cancer patient.

You see, we know that the transition to some form of value-based payment is inevitable. The overarching questions that come to mind are: How fast will it happen? How pervasive will it be? What will it look like when it finally comes? We also know that the technical exigencies triggering radiation oncology’s current crisis, which include utilization screens, absolute growth in dollars of the radiation oncology pool and the economic reality that accurate valuation requires consideration of sequential processes in the steps of care (to capture efficiencies in time, labor and equipment), tend to grab our immediate attention.

Yet, the larger objective for our specialty in addressing the value proposition in health care requires us to engage in a complex calculus seeking to maximize economic effect to ensure access (including profit), maximize priorities that sometimes may seem to be

at the cost of profit (but theoretically not, although the baseline may look different) and maximize public benefit (e.g., population health and value). ASTRO leadership has always known that, depending on circumstance, we trade on these currencies at different exchange rates.

In this regard, ASTRO formulated an approach to payment reform that reaches a balance of these factors while engaging current cutting-edge health policy thinking on the topic of payment reform. In an abbreviated form, the three aspects of the ASTRO program are:

Aspect 1: Redesign Key Radiation Therapy Codes

- Concerns from CMS and others about radiation therapy use, cost and other factors have contributed to significant fluctuations in Medicare reimbursement, including severe cuts to commonly used radiation treatments.
- In response to CMS, ASTRO recommended revisions of the descriptors of numerous radiation therapy codes to better reflect clinical practice, including the use of new technology.
- ASTRO has asked Congress to stabilize payment rates to ensure that access to care is not limited.

Aspect 2: Implement Quality-Based Incentive Payments

- ASTRO has asked Congress to link ASTRO’s practice accreditation program and our other safety and quality improvement initiatives to Medicare payments for quality, including bonus payments based on quality measures or participation in clinical data registries.

Aspect 3: Engage the Value Proposition and Incentivize Cost-Effective Cancer Care

- In an effort to link payment reform to improvement in quality, reduction in the variation in care and coordination of care, ASTRO launched a comprehensive payment reform effort in 2012: the Payment Reform Task Force, chaired by Brian Kavanagh, MD, MPH.
- ASTRO, along with 27 other medical specialty societies, is participating in the American Board of Internal Medicine Foundation’s Choosing Wisely Campaign, identifying low value interventions that require further discussion between the patient and their physician.

Our action plan represents a holistic and realistic approach to addressing payment reform. The plan is a product of many months of research and consultation with stakeholders, including CMS, Congress, consultants, vendors and members from all of our venues of practice. The details of the plan will continue to evolve as the tenets of health care reform take shape and substance, including the possible resolution of the Sustainable Growth Rate dilemma. ASTRO has stepped forward and developed a comprehensive plan that confronts payment reform head-on by addressing the salient issues of cost, quality and value. Now that is the kind of wishful thinking I hope we can get our arms around.

Dr. Steinberg is professor and chairman of radiation oncology at the David Geffen School of Medicine at UCLA. He welcomes comments on his editorial at astronews@astro.org.

PREVIEWING ASTRO'S 55TH ANNUAL MEETING

EDUCATIONAL UPDATES, exciting research results and great colleague interactions await you at the 55th Annual Meeting of the American Society for Radiation Oncology (September 22-25, 2013). Our meeting will be held in the beautiful city of Atlanta at the Georgia World Congress Center. Located in the heart of downtown Atlanta, the Georgia World Congress Center is conveniently located near downtown Atlanta's hotels and major attractions, including the CNN Center, Centennial Olympic Park, the Georgia Aquarium and the World of Coca-Cola.

Hartsfield-Jackson Atlanta International Airport, located only 15 minutes away from the center, will serve both our national and international attendees with many daily options for commuting to our Annual Meeting. The theme for this year's meeting is "Patients: Hope, Guide, Heal." With all of the changes in health care on the horizon, I felt that it was important to keep us primarily focused on our patients and the best care that we can provide for them. By keeping our sights clearly fixed on our patients, we should be able to navigate issues of safety, multidisciplinary care, reimbursement and technology assessments—just a few of the issues at hand. These and many other topics, including the importance of registries, will be explored in detail.

In addition, there will be a focus on outcomes, specifically patient-reported outcomes. This endpoint has become a clear need in terms of understanding exactly what our patients experience during treatment as well as

in follow-up and in their survivorship. We are all well aware that the traditional clinician-reported outcomes of the past underestimate the challenges that our patients experience during their treatment and beyond; therefore, obtaining the "real results" via patient-reported outcomes becomes paramount if we want to provide the best care possible.

To reinforce the need and importance of patient-reported outcomes, Jeff A. Sloan, PhD, of the Mayo Clinic in Rochester, Minn., will serve as a guest lecturer on Sunday afternoon, September 22. He will help us better comprehend the impact of patient-reported outcomes on our ability to understand and improve patient care.

Continuing the focus on patients at the Annual Meeting this year, we will have several keynote speakers who will push us to better patient care. Darrell G. Kirch, MD, president and chief executive officer of the Association of American Medical Colleges, will speak on the future training of physicians to be able to take excellent care of patients and to navigate the ever-changing health care landscape. Additionally, Otis W. Brawley, MD, chief medical officer of the American Cancer Society, will address the issue of survivorship (a new requirement for us all, and one that should positively impact our patients). Finally,



Peter Friedl, MD, PhD, chairman for Microscopical Imaging of the Cell at the St. Radboud University Nijmegen Medical Centre, University of Nijmegen in the Netherlands and professor at MD Anderson Cancer Center in Houston, will help us look to the future of our field through his work on time-resolved visualization of cell-matrix interactions and cell patterning during cancer invasion and immune cell interactions.

The Presidential Symposium, titled "Prostate Cancer: Patient Focused Advances" on Sunday, September 22, will be an in-depth evaluation of all aspects of prostate cancer. We will focus on controver-

Continued on Page 34

The scientific oral and poster presentations promise to be some of the most comprehensive in ASTRO history with 2,330 abstract submissions.

REMEMBERING DAVID H. HUSSEY, MD, FASTRO

DAVID H. HUSSEY, MD, FASTRO, former ASTRO chairman, passed away on April 17, 2013, at St. David's Georgetown Hospital from complications of pulmonary fibrosis. He was born in Savanna, Ill., a small town west of Chicago on the Mississippi River on August 26, 1937, to Lemuel and Bernice (Holbert) Hussey. His father was the town family doctor, and David used to ride along with him when he made house calls in the country. He married Miriam Thompson in 1972 in Clifton, Texas.

He received his BS in 1959 from Beloit College in Beloit, Wis., attended graduate school in biophysics at Johns Hopkins University in Baltimore before going to medical school and graduated from Washington University in St. Louis in 1964. He completed a residency at the University of Iowa in Iowa City, Iowa, and then a fellowship at MD Anderson Cancer Center in Houston in 1969.

Dr. Hussey's distinguished career began with an appointment to the faculty at MD Anderson Cancer Center, a position that he held until 1983, ultimately being named tenured professor. David established the first integrated clinical and research neutron treatment program in the U.S. with Gilbert H. Fletcher, MD, H. Rodney Withers, MD, DSc, FASTRO, Max L. M. Boone, MD, and James B. Smathers, PhD, FASTRO. He became head of the division of radiation oncology at the University of Iowa and directed the program until 2000. He then spent a sabbatical year at the American Board of Radiology (ABR) in Tucson, Ariz. Subsequently, he accepted a position

as professor in the department of radiation oncology at the University of Texas Health Science Center at San Antonio in 2001. Upon retirement, he and Miriam relocated to Sun City, Texas in 2006.

He was passionate about patient care and mentoring residents that passed through his programs. He was a major voice in radiation oncology, having served as president of the Gilbert H. Fletcher Society, the American Radium Society, ASTRO and the Radiological Society of North America. He worked in other national organizations, including the Commission on Cancer of the American College of Surgeons, and as a trustee of the ABR. He received Distinguished Alumnus awards from Savanna High School, Washington University School of Medicine and MD Anderson Cancer Center.

Dave considered his greatest accomplishment raising three sons to be happy and productive men. He loved watching their sporting, music and scouting events. He was a loyal father and friend and was always sought out by patients who needed encouragement and support dealing with a cancer prognosis or his colleagues in organized radiation oncology for advice and counsel.

David had a wry sense of humor; one needed to listen quietly or one would miss the punch lines. He did not have much patience with overblown rhetoric. He was a practical visionary. His work at the ABR on automated exams and recertification has and will result in higher quality radiation therapy. He led efforts for



David H. Hussey, MD, FASTRO

ASTRO on Maintenance of Certification that defined lifelong learning in radiation oncology. His service to ASTRO coincided with the maturation of the organization and the specialty. When one counts all of the organizations that had Dave Hussey as a leader and volunteer, one recognizes an individual who spent much of his adult life in service to others. He will be greatly missed.

He is survived by his wife Miriam of 40 years, sons Michael Hussey, Andrew Hussey and Thomas Hussey, brother John Hussey and wife Marlene, and sister Kathleen Burch and husband Joe.

Dr. Rose, a long-time friend and colleague of Dr. Hussey, is associate and technical director of Valley Radiotherapy Associates in Los Angeles. He serves on the Radiation Oncology Institute's Board of Trustees and is the co-chairman of the National Radiation Oncology Registry.

LETTERS

EDITOR'S NOTE: ASTROnews received the following comment regarding the Chairman's Update from Michael L. Steinberg, MD, FASTRO, which appeared in the Spring 2013 issue of ASTROnews. Read the original column at www.astro.org/News-and-Media/ASTROnews/Spring-2013/Are-we-a-generation-away-from-extinction-.aspx.

CONTESTED ELECTIONS: HARMFUL AND GOOD

I would like to voice my agreement with Dr. Steinberg regarding the contested elections so prevalent in ASTRO. Most of us in the community are extremely impressed by the qualifications of all candidates and usually make a less than educated guess at the "best" candidate. Without any measurement of each individual's record and performance, I suspect that many of us vote on demographics and thus try to balance the board in terms of academicians, community leaders, geography and even gender.

I think the best people to nominate talented leaders are the colleagues who work in the ASTRO committees with the candidates and the Board members. My experience has been that the ASTRO leadership has an excellent eye for

talent and can make that judgment better than those of us who are uninformed and ignorant of the candidates' performances and dedication. I would strongly suggest that the contested elections do as much harm to our organization as they do good, and I would want the active, talented volunteers who step forward to run for positions to not have their egos and enthusiasm for ASTRO dashed by the capricious votes of the members.

Frederick C. David, MD
Redwood Regional Medical Group
Santa Rose, Calif.



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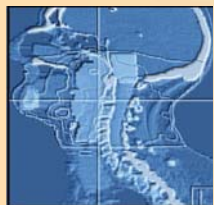
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SOCIETY NEWS

ASTRO'S 2013 Board of Directors ballot is now open

The ballot is now open for eligible members to cast votes in ASTRO's 2013 Board of Directors elections. The Nominating Committee, chaired by Leonard L. Gunderson, MD, MS, FASTRO, developed a list of candidates for each open position and reviewed each candidate's service to ASTRO and participation in ASTRO activities. The Committee

considered the criteria for each position, the strategic goals of the Society, and current and future challenges facing health care and radiation oncology. Following deliberations and approval, Dr. Gunderson presented the following slate of nominees to the Board of Directors.

President-elect

Bruce D. Minsky, MD
MD Anderson Cancer Center, Houston

Louis Potters, MD, FASTRO
North Shore-LIJ Health System, New Hyde Park, N.Y.

Secretary/Treasurer-elect

Jeff M. Michalski, MD, MBA, FASTRO
Washington University School of Medicine, St. Louis

Howard M. Sandler, MD, MS, FASTRO
Cedars-Sinai Medical Center, Los Angeles

Health Policy Council Vice-chairman

Joel M. Cherlow, MD, PhD
Long Beach Memorial Medical Center, Long Beach, Calif.

Thomas J. Eichler, MD
CJW Medical Center, Richmond, Va.

Science Council Vice-chairman

Theodore L. DeWeese, MD
Johns Hopkins University School of Medicine, Baltimore

George D. Wilson, PhD
William Beaumont Hospital, Royal Oak, Mich.

Eligible members are encouraged to cast their votes today. Members eligible to vote include active, allied, affiliate and international. ASTRO has a Web-based electronic voting process that ensures the authenticity and secrecy of votes. You can view biographical data and statements for each nominee by visiting www.astro.org/vote. The voting deadline is 5:00 p.m. Eastern time on July 2, 2013.

In Memoriam

ASTRO has recently learned that the following members have passed away.
Our condolences go out to their families and friends.

John F. Archer, CMD

Donal Hollywood, MD, PhD

David H. Hussey, MD, FASTRO

Paul J. Kaminski, MD

Denise Lonergan, MB

The Radiation Oncology Institute (ROI) gratefully accepts gifts in memory of or in tribute to individuals.
For more information, call 1-800-962-7876 or visit www.roinstitute.org.

ASTRO members volunteer at international conferences


ASTRO members are sharing their knowledge and expertise with attendees at international conferences and symposia. Here are two groups of ASTRO members that have volunteered at international specialty meetings.

Most recently, eight ASTRO members delivered keynote addresses, expert panel sessions and case presentations in February 2013 at the Cancer Care Education and Research Conference International (Cancer CI-2013) conference in Hyderabad, India (pictured at right).

ASTRO members involved included Jennifer R. Bellon, MD, of the Dana-Farber Cancer Institute in Boston, Avraham Eisbruch, MD, of University of Michigan Health Systems in Ann Arbor, Mich., Karyn A. Goodman, MD, MS, of the Memorial-Sloan Kettering Cancer Center in New York, Stephen M. Hahn, MD, of the University of Pennsylvania School of Medicine in Philadelphia, Patrick A. Kupelian, MD, of UCLA in Los Angeles, Prabhakar Tripuraneni, MD, FASTRO, of Scripps Clinic in La Jolla, Calif., John H. Suh, MD, of Cleveland Clinic in Cleveland, and Akila N. Viswanathan, MD of Brigham and Women's Hospital in Boston.



In January 2012, a group of five ASTRO members facilitated the Philippine Radiation Oncology Society's Pediatric Radiation Oncology Symposium, held in Manila, Philippines. Paul J. Chuba, MD, PhD, of St. John Health Systems in Warren, Mich., Natia Esiashvili, MD, of Emory University in Atlanta, Anita Mahajan, MD, of MD Anderson Cancer Center in Houston, Arnold C. Paulino, MD, of The Methodist Hospital and Texas Children's Hospital in Houston, and Kenneth B. Roberts, MD, of Yale University School of Medicine in New Haven, Conn., all participated in the program.


The group was responsible for the entire two-day symposium's program, which included topics such as differences between pediatric and adult radiation oncology, late effects of radiation and gene therapy in pediatric oncology. 

Expanding the global mission of the International Education Subcommittee

ASTRO's International Education Subcommittee (IES) is taking major steps to increase its work in enhancing the Society's international outreach efforts. Traditionally, the IES has welcomed international Annual Meeting attendees with an international breakfast, international poster walks and foreign language sessions, in addition to coordinating ASTRO members' educational missions to regional meetings and centers of excellence in Africa, China, India, Latin America and Southeast Asia throughout the year.

In an effort to greater utilize ASTRO resources and expertise—while recognizing the considerable and diverse global outreach efforts of individual ASTRO members and academic institutions, the IES is undergoing a major organizational change to optimize coordination of global health efforts within ASTRO and with other medical specialty societies and to serve as a resource for ASTRO

members who are interested in participating in global health missions.

Spearheaded by Timothy R. Williams, MD, FASTRO, IES Chairman Nina A. Mayr, MD, FASTRO, and IES Vice-chairman Kenneth Hu, MD, the expanded organizational structure was rolled out in April. Five work groups representing the aforementioned regions will identify the region's top needs and work with an Information Technology work group, International Liaison group and representatives from SCAROP, ADROP, NCI, RTOG and ARRO, to identify effective solutions. With these adjustments, IES will continue its traditional role of educational exchange with international colleagues, but also serve as centralized resource to promote fellowship, research and clinical expertise on multiple levels with physicians, physicists, therapists and ancillary supportive representatives. 

International Impact

ASTRO MEMBERS VOLUNTEER TIME, KNOWLEDGE AND RESOURCES IN OUTREACH EFFORTS

BY BRITTANY ASHCROFT, COMMUNICATIONS MANAGER, BRITTANYA@ASTRO.ORG

ASTRO members share their knowledge and expertise in a variety of ways. Here, some members relate their stories about volunteering to improve global health.

Radiating Hope in Senegal

Founded in 2010 by Brandon J. Fisher, DO, a radiation oncologist with Gamma West Cancer Services in Ogden, Utah, Radiating Hope (www.radiatinghope.org) is a non-profit that works to advance cancer care in and to provide radiation equipment to developing countries.

“During residency, I searched for outreach opportunities and medical missions, but found limited opportunities in the specialty,” Dr.

Fisher said. “I talked with a mentor of mine, Luther W. Brady Jr, MD, FASTRO, and he advised me to start a non-profit that gives tax deductions for donated machines and then refurbishes the machines for developing countries. And Radiating Hope was born.”

Currently, Radiating Hope is helping Institut Curie de L’Hopital Aristide Le Dantec (IC) in Dakar, Senegal, the only radiation oncology center in Senegal.

In December 2012, a team from Radiating Hope delivered a high-dose-rate (HDR) brachytherapy machine to IC, with the help of volunteers and sponsors. That team included Arno J. Mundt III, MD, FASTRO, and John P. Einck, MD, both radiation oncologists at the University of California, San Diego in La Jolla, Calif.

“We were teaching them and bringing and calibrating the equipment,” Dr. Mundt said. “They were thrilled and welcomed us with open



PHOTOS COURTESY OF DR. FISHER



Left: Patients wait to see a physician at IC, with medical records stored in the background. **Right:** Dr. Fisher (right) and Adam Shulman (third from right), Radiating Hope Senegal project director, meet with the directors of IC.

arms. They knew that it was the only way to cure these women.”

Dr. Einck traveled back to Senegal in March with Radiating Hope to help IC treat patients.

“When you walk into the clinic, you get a sense of the overwhelming need for these services and the lack of adequate amounts of equipment for radiation therapy,” Dr. Einck said. “A job that’s so simple for me to do at home can be so incredibly meaningful and can accomplish so much with a small amount of energy in West Africa. [It was] some of the most meaningful work I’ve ever done.”

Dr. Fisher hopes that others in the field will share their knowledge with the rest of the world.

“We have amazing people in our field doing amazing things,” Dr. Fisher said. “I hope that one day it will be second nature to spend weeks at a time in these developing countries working as a team to advance cancer care to all, even the poorest of nations.”

Helping a Hospital in Haiti

After a 7.0 magnitude earthquake struck Haiti in January 2010, Thomas Eichler, MD, a radiation oncologist at Thomas Johns Cancer Hospital in Richmond, Va., knew he had to help.

Dr. Eichler, who had previously traveled to Haiti on three other occasions, was moved by these earlier experiences and knew that he wanted to return and help those in need, serving as an internist instead of a radiation oncologist.

In April 2010, Dr. Eichler received an email from a group of doctors and dentists from his alma mater, the University of Notre Dame in South Bend, Ind. The email was a call for physicians and nurses to help staff a field hospital and clinic in Léogâne, the epicenter of the earthquake.

Dr. Eichler was part of “Team 18,” comprised of 16 nurses and



PHOTO COURTESY OF DR. FISHER

Dr. Einck performs hands-on training of cervical brachytherapy at IC.

doctors from a variety of disciplines, and assisted by several Haitian medical personnel. He helped staff the clinic, which saw nearly 200 patients daily, except for Mondays, when more than 300 patients visited. The team worked closely and seamlessly together in relatively primitive conditions.

“We freely consulted with each other regarding symptomatology, mystery rashes and medication dosages,” Dr. Eichler said. “Everyone just wanted to do their best for the patient, just like we would do in

our own individual practices.”

Throughout his time in Haiti, Dr. Eichler was amazed by the Haitians’ attitudes.

“It seems like there should be a breaking point where people just give up,” he said. “Suffice it to say that Haitians are a proud and resilient people with a deep faith tradition. The job of people like us is to keep that breaking point out of reach, out of sight and continue to offer help and hope to a country that deserves better.”

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PHOTO COURTESY OF DR. EICHLER

Dr. Eichler treats a young patient in Haiti.

Improving Patient Care in Peru

Daniel C. Schiffner, MD, a radiation oncologist at The Angeles Clinic and Research Institute in Santa Monica, Calif., and Dante E. Roa, PhD, a medical physicist and associate professor at the University of California, Irvine in Orange, Calif., traveled to Peru in October 2012.

Dr. Roa, a native of Peru, asked Dr. Schiffner to accompany him on the trip to educate attendees on modern techniques in radiation therapy cancer treatment as part of the Peruvian Society of Radiation Oncology and Medical Physics' annual meeting.

After the meeting, Drs. Schiffner and Roa were invited to several radiation centers in Peru to assess the technology and techniques of each center's radiation therapy program.

Seeing the Peruvian radiation therapy centers first-hand showed them just how many patients the centers must handle on a daily basis.

"The number of patients that an

individual radiation oncologist treats is staggering compared to what we are accustomed to in the United States," Dr. Schiffner explained. "At one center in Lima, they treat roughly 300 patients per day with only five attending radiation oncologists."

Although the Peruvian centers are treating a large number of patients with high demands on time, resources and staff, Dr. Schiffner saw a positive outlook from the staff.

"There is a real optimism in the country and in the Peruvian radiation oncology community about the future," Dr. Schiffner said.

Dr. Schiffner is grateful for the opportunity to share his knowledge with radiation oncologists in Peru. He is planning a similar trip to Brazil later this year.

"Looking back, this was one of the most rewarding and wonderful experiences of my entire professional career," Dr. Schiffner said. "Our work in Peru and what we were able to accomplish

during our educational sessions have the potential to substantially improve the state of radiation therapy and the care of patients with cancer across the nation of Peru."

Impacting Iraqi Health Care

Muthana Al-Ghazi, PhD, a professor and director of medical physics at the University of California, Irvine in Orange, Calif., is assisting in the development of radiation oncology and medical physics practices in Iraq.

Dr. Al-Ghazi's work in Iraq has included serving as an international external advisor to the Iraqi Cancer Board; advising the development of radiation therapy facilities and of syllabi for physics instruction to radiation oncology residents and medical physics students; and speaking at several conferences.

In December 2009, Dr. Al-Ghazi was invited to attend the Iraqi Ministry of Health research conference in Baghdad, which resulted in a three-day

Right: Dr. Schiffner delivers a lecture at the Peruvian Society of Radiation Oncology and Medical Physics' annual meeting.

Below: Dr. Schiffner (front row, far left) and Dr. Roa (front row, second from left) are joined by the faculty and attendees of the Peruvian Society of Radiation Oncology and Medical Physics' annual meeting.



PHOTOS COURTESY OF DR. SCHIFFNER





PHOTO COURTESY OF DR. AL-GHAZI



PHOTO COURTESY OF DR. JONES

series of lectures and practical workshops. In April 2010, he presented a week-long workshop on radiation oncology physics.

"The result of these two activities helped complete an ongoing effort on the part of my hosts to transform the radiotherapy practice to 3-D CRT, which has become the mainstay of the clinical practice at this hospital [the Baghdad Radiotherapy and Nuclear Medicine Hospital]," Dr. Al-Ghazi said.

For Dr. Al-Ghazi, his international volunteer work is an extension of his interest in sharing knowledge.

"Knowledge increases in value when shared. There is a lot of talent in the U.S. and the western world. It is imperative that this is transmitted to the rest of the world community," he said. "It contributes positively to understanding across cultures, in addition to its value in improving the health and well-being of people across the globe."

Dr. Al-Ghazi also has taken his experiences in global health into consideration when practicing medical physics in the U.S.

"It is a sobering reminder of the fact that others work in far more challenging environments and still manage to provide excellent care to patients," he said. "It focuses attention on understanding and appreciating the basic principles of our profession."

Volunteering Research in Vienna

Glenn W. Jones, MD, MSc, BSc, a radiation oncologist at Trillium Health Partners in Ontario, Canada, has worked with the International Atomic Energy Agency (IAEA) of the United Nations in Vienna, Austria for the past 10 years to lead and assist with randomized international trials in breast, lung, esophageal, rectal and cervical cancers.

His work with the IAEA has led him to collaborations with 44 investigators from more than 30 countries.

"I've found that we all share clinical values and have similar abilities in radiation oncology," Dr. Jones said. "Our use of evidence, clinical approach and ways of caring are not really different. These investigators are willing to share, learn and contribute."

In addition, Dr. Jones has conducted a voluntary research and educational study with students in Africa. The group published two papers in two African journals at the end of 2012.

With his experience in trials in various disease sites over 10 years, Dr. Jones has seen the evolution of radiation therapy across the world.

"As compared with practice three to four decades ago, there is no longer a 'standard model' of quality radiotherapy. Centers around the world, even across the street, have very different resources, equipment, methods and outcome assessments," he said. "The

Left: Dr. Al-Ghazi (seated) and physicists and radiation oncologists from the Baghdad Radiotherapy and Nuclear Medicine Hospital work in the treatment planning suite.

Right: Dr. Jones (back row, second from left) is joined by faculty, staff and students from more than 12 countries in 2010 while in Ethiopia.

revolution in equipment and technologies has been a big factor. Certainly, the recent focus on quality in radiation can probably be evolved into a global model."

Dr. Jones' international volunteer work stems from a lifelong interest in global concerns and global health, which started with a grade four teacher who worked part-time for the United Nations.

"I believe radiation oncologists should give some time, apart from their direct clinical care, to advancing the discipline and profession and to improving the quality of care," he said. "Access to radiotherapy is not uniform around the world, and quality of care varies, and we should improve these."

Refining Patient Programs in India

Shankar P. Giri, MD, FASTRO, a professor of radiation oncology at the University of Mississippi Medical Center in Jackson, Miss., spent nearly one year (October 2010 through August 2011) volunteering his service

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LESSONS IN GLOBAL HEALTH

ASTRO/ARRO program provides opportunities for resident rotations in developing countries

BY BRITTANY ASHCROFT, COMMUNICATIONS MANAGER, BRITTANYA@ASTRO.ORG

The Association of Residents in Radiation Oncology (ARRO) is working to provide expanded opportunities for radiation oncologists to achieve more equitable health care around the world through its Global Health Initiative (GHI).

ARRO's GHI mission focuses on humanitarian outreach, education and research by improving international collaboration and by fostering a commitment to underserved populations by exposing residents to career opportunities in global health.

"The overall goal for GHI is to be the voice for residents interested in global health," said Tracy Sherertz Bray, MD, of Loyola University Medical Center in Chicago and a GHI Subcommittee member.

The GHI is a subcommittee of ARRO, under the guidance of ASTRO's International Education Subcommittee. In March 2011, the GHI Subcommittee established the ASTRO/ARRO Global Health Scholars Program, a resident-coordinated rotation in a developing country, which provides financial support to residents interested in participating in a one-month (or longer) project of their own design in a developing nation.

"There was interest voiced by a small group of residents to see a formally organized elective that would allow a global health experience to happen under the auspices of residency," Dr. Bray said.

Now in its second year, the program, which provides three senior residents a \$1,500 scholarship to work on a clinical, outreach/educational or research project in a developing nation, is the main focus of the GHI Subcommittee.

"The goal now is to make sure it is a sustainable and successful program," Dr. Bray said.

Part of ensuring that success is learning from the program's participants.

"We are trying to come up with a feedback process for recipients to turn something back to the International Education Subcommittee," said Mira Shah, MD, of Henry Ford Health System in Detroit, and a member of the GHI Subcommittee.

While some of the program's impact remains to be seen, residents are excited about the opportunities it offers.

"The momentum has switched from getting it started to let's make sure it works. The opportunity has been well received by residents interested in global health," Dr. Bray said. "A lot of people out there are interested in global health, but just haven't found an avenue to work that into their practice."

Another goal is to increase the exposure of the Global Health Scholars Program to encourage more residents to apply.

"Residents are so busy, and it's daunting to think about asking for one month off, but it's good to hear that people are able to do it and that it is well received in home institutions," Dr. Bray said. "You just have to start early. It takes a while to establish a good project."

But the time it takes to develop a project, get approved and apply for the program is well worth it.

2012 SCHOLARS

Tracy Sherertz Bray, MD, Cambodia

Tracy Sherertz Bray, MD, a resident at Loyola University Medical Center in Chicago, traveled to Phnom Penh, Cambodia to work with the Sihanouk Hospital Center of Hope.

Having visited Cambodia in 2008, Dr. Bray was aware of the country's lack of access to modern medical care. When a colleague gave a presentation on her own volunteer experience at Sihanouk Hospital, Dr. Bray learned of the hospital's goal to be the country's primary teaching institution, attracting international physicians and other volunteers to help.

"The severity and nature of cases she described were really interesting, as was her description of some of the cultural differences in attitudes toward illness," Dr. Bray said.

From there, Dr. Bray worked with the hospital's radiology department chairman to gauge his interest in having a radiation oncology resident volunteer for five weeks and to develop a plan for an oncology teaching project.



PHOTO COURTESY OF DR. BRAY

During her time in Cambodia, Dr. Bray performed a variety of tasks, from holding formal didactic and case-based sessions at the hospital to spending time at a partner charity hospital in Phnom Penh, where the only cobalt source in Cambodia is housed.

“I gained an appreciation for the types and severity of cancer cases encountered in Cambodia, discovered the extreme limitation of treatment options available to the majority of the population and gained an understanding for the unique attitudes toward illness,” she said.

For Dr. Bray, one of the most surprising things was the lack of formal post-medical school training. Instead, most medical school graduates go directly into practice, while some enter apprenticeships in a sub-specialty.

“There’s a huge discrepancy in health care in the world, and I want to help change that,” said Dr. Bray, who plans to travel back to Cambodia this summer.

Rachel Jimenez, MD, India

For Rachel Jimenez, MD, a resident in the Harvard Radiation Oncology Program in Boston, the program allowed her to develop an international experience at the All India Institute of Medical Sciences (AIIMS) in New Delhi, India.

“My goal was to engage in medical care in the developing world and to view what cancer care was like for the average person in need of treatment but unable to pay for care,” she said. “AIIMS cares for a mostly impoverished population of patients from all over the country and the surrounding region.”

Dr. Jimenez worked closely with D.N. Sharma, MD, DNB, a professor of radiation oncology at AIIMS. He



PHOTO COURTESY OF DR. MEHTA

Left: Dr. Bray (right) developed a friendship and mentorship with another female physician-in-training while in Cambodia.

Right: Dr. Mehta (center) works with the chief resident (left) and a dosimetrist-in-training (right) in the HDR suite at Hospital de Câncer de Barretos.

allowed her to spend her time in his clinics, brachytherapy procedures and educational pursuits.

While she expected a large number of patients, the sheer volume of patients coming to AIIMS every day and the logistical and health-literacy challenges that were the result of serving an indigent population surprised Dr. Jimenez.

“This experience taught me a great deal about what it means to be dedicated, both to our field and to our patients,” she said. “Getting to observe the level of devotion and passion they [faculty and residents at AIIMS] bring to radiation oncology despite, or perhaps because of, the challenges was very inspiring.”

Niraj Mehta, MD, Brazil

Niraj Mehta, MD, a resident at the University of California, Los Angeles (UCLA), utilized the scholars program to travel to Hospital de Câncer de Barretos in Barretos, Brazil.

With UCLA’s ties to the hospital in Barretos, Dr. Mehta had met the hospital’s director of cancer care at the 2011 ASTRO Annual Meeting in Miami Beach, Fla., and learned about the facility and its work.

“I knew at that moment that I had to spend time there for the clinical and cultural experience,” Dr. Mehta said.

LESSONS IN GLOBAL HEALTH

One of Dr. Mehta's takeaways from the experience was the different meaning of cancer in different cultures.

"Oncology is not just oncology wherever you go. Cancer doesn't mean the same thing wherever you go," he said. "There are things you assume, and they are different, the professionalism, the way patients and doctors interact, etc."

While Dr. Mehta knew he would learn from the experience in Brazil, the vast impact of his time there surpassed his expectations.

"I didn't know what exactly I was going to learn. I knew I would get to experience certain procedures, but the reality of what I got was ridiculous," Dr. Mehta said. "I knew it was going to be great, but it was just beyond belief."

2013 SCHOLARS

Sarah Milgrom, MD, Senegal

Sarah Milgrom, MD, a resident at Memorial Sloan-Kettering Cancer Center in New York, learned about the Global Health Scholars Program at the 2012 ASTRO Annual Meeting in Boston and is using the stipend to travel to the Institute Curie de L'Hospital Aristide Le Dantec in Dakar, Senegal with Radiating Hope (see "International Impact" on page 14).

Dr. Milgrom's passion for global health stems from her previous work in Ecuador as a third-year medical student where she experienced the large disparities in medical care among different regions in the world.

"Those who are sick and lack access to medical care represent a group desperately in need of help," she said. "In developing countries, people suffer and die from curable conditions. It is critical that we find ways to deliver existing therapies to a greater proportion of the population. I want to devote part of my career to this goal."

During her trip, Dr. Milgrom will work with the group from Radiating Hope to train local doctors how to treat cervical cancer with high-dose-rate brachytherapy.

"I hope that the group's work will have a lasting impact for women in Dakar," she said. "It has always been my belief that medical professionals with the good fortune of working in developed countries should devote at least part of their careers to the relief of suffering of people who lack access to the services available to us."

Etin-Osa Osa, MD, Tanzania

A resident at New York University Langone Medical Cen-

ter, Etin-Osa Osa, MD, is taking the opportunity from the program to travel to Bugando Medical Center (BMC) in Mwanza, Tanzania.

During a visit to BMC in October 2012 for the Infections and Cancer International Conference, Dr. Osa toured the BMC Radiation Therapy Center, which was still under construction. The center is the second radiation therapy center in the country of more than 42 million people.

"I hope to work closely with the oncologists at BMC as they establish their radiation treatment protocols for different disease sites," she said. "It is a much needed new facility with a potentially high impact on cancer mortality of Tanzanian women since breast and cervical cancers are the two malignancies with the highest incidence and mortality in Tanzanian women."

Global health and international medicine are personally important to Dr. Osa, and she sees this experience as fostering her "desire to contribute to health care for people in need, not just the underserved population in the United States, but globally."

"This experience will increase my exposure to a broader spectrum of malignant diseases and presentations and increase my social awareness as a physician and global citizen," she said.

Youssef Zeidan, MD, PhD, Lebanon

Youssef Zeidan, MD, PhD, a resident at Stanford Hospital and Clinics in Stanford, Calif., applied to the program to gain experience in the oncology practices of a developing country with a different medical and social system. He is heading to the American University of Beirut Medical Center in Beirut, Lebanon.

Dr. Zeidan's goals include comparing patterns of care to U.S. standards of care practice, experience the modalities offered to cancer patients in Lebanon and identify limitations for radiation oncology practice in Lebanon.

"This will be a chance to exchange mutual information and evidence-based clinical expertise," he said. "This opportunity will also help me point out areas of deficiency within oncology practice in Lebanon and participate in future global aid missions targeting the Middle East."

For more information on GHI and the Global Health Scholars Program, visit www.astro.org/ARRO/Global-Health-Initiative/Index.aspx.



Coordinating a Culture of **QUALITY**

CANADIAN PARTNERSHIP FOR QUALITY RADIOTHERAPY: A MODEL FOR RADIATION TREATMENT QUALITY AND SAFETY

BY JEFF CAO, MD, MBA, MICHELLE NIELSEN, MSC, CAITLIN GILLAN, MRT(T), BSC, MED, AND MICHAEL MILOSEVIC, MD

Radiation Therapy in Canada

For the past decade, cancer has been the leading cause of mortality in Canada, accounting for about 30 percent of all deaths¹. It is estimated that more than 186,000 new cases of cancer (excluding about 81,000 non-melanoma skin cancers) and more than 75,000 deaths will occur in 2013². Currently, there are about 40 radiation treatment programs across Canada, primarily with academic affiliations. More than 100,000 radiation treatment courses are prescribed annually and delivered collaboratively by interprofessional teams of radiation oncologists, radiation therapists and medical physicists.

The Canadian Partnership for Quality Radiotherapy (CPQR)

Now more than ever, quality assurance plays a critical role in radiation treatment planning and delivery, given the increasing complexity and rapid pace of technologic innovation.

Driven by an urgent need to harmonize radiation treatment, quality and safety practices across Canada, the CPQR was founded in 2010 as an alliance among the three key national professional organizations: the Canadian Association of Radiation Oncology (CARO), the Canadian Organization of Medical Physicists (COMP) and the Canadian Association of Medical Radiation Technologists (CAMRT), with financial and strategic backing provided by the federal government through the Canadian Partnership Against Cancer (CPAC), a national resource for advancing cancer prevention and treatment.

The vision and mandate of CPQR is to support and promote the universal availability of high quality and safe radiation therapy for all Canadians through system performance initiatives aimed at improving quality and mitigating risk.

Initial Successes

CPQR has been very successful over the past two years by raising awareness about the importance of a coordinated national strategy for radiation treatment quality and safety.

Early momentum was generated by addressing unmet needs in two areas.

First, the Quality Assurance Guidance for Canadian Radiation Treatment Programs document (www.cpqr.ca/qa.html) was developed to outline key organizational structures and processes required to ensure high quality and safe radiation treatment, together with key quality indicators for programmatic evaluation. The document, initially published online in April 2011, was downloaded more than 2,500 times in the first six months and used by programs across Canada to motivate quality improvement. It has also been recognized internationally and was highlighted at the 2011 ASTRO Annual Meeting.

Second, COMP and the Canadian medical physics community embarked on the monumental task of reviewing and revising existing Technical Quality Control Guidelines (www.cpqr.ca/tqc.html), which provide direction for ensuring optimal performance of radiation treatment equipment. A structured process was developed that incorporated expert review and revision, broad community consultation to ensure relevance and practicality and validation in a real-world clinical environment. Together, these initiatives engaged and empowered the radiation treatment community across Canada and highlighted the importance of a coordinated national strategy to driving radiation treatment quality improvement.

The Next Five Years

Based on these early successes and the momentum across the country, CPQR recently received funding for an additional five years to build an impactful, collaborative and sustainable national program for radiation treatment quality and safety. CPQR will continue the initiatives started in the first two years and also will expand to encompass other important areas, including national reporting of radiation treatment incidents and the introduction of a patient voice to the radiation treatment quality and safety dialogue.

Continued on Page 22

QUALITY

Important deliverables in each of these areas include:

- **Quality Assurance Guidance for Canadian Radiation Treatment Programs**—CPQR will publish an updated suite of guidelines and indicators in September 2013, reflecting extensive community consultation and revision over the past two years. Key indicators from this suite will be incorporated into a national accreditation program for radiation treatment to ensure long-term sustainability, and performance will be publicly reported to motivate utilization across the country.
- **Technical Quality Control**—Nine quality control procedures for radiation treatment equipment, including integrated cone-beam imagers and treatment planning systems, were published in April and an additional six are in various stages of development. These are “living” documents and will be revised based on feedback from the radiation treatment community to keep pace with technological advancement.
- **National System for Incident Reporting and Learning (www.cpqr.ca/ir.html)**—CPQR will partner with the Canadian Institute for Health Information to develop an online system for real-time reporting of radiation treatment incidents, rapid dissemination of relevant information and discussion about ways to prevent incident recurrence and propagation.
- **Patient Perspective on Radiation Treatment Quality and Safety (www.cpqr.ca/pe.html)**—CPQR is committed to ensuring that patient perceptions and values about safety during treatment are acknowledged and considered in CPQR decision-making and messaging. This will be accomplished through patient representation on the steering committee and the formation of a patient advisory group. Focused indicators will be developed to better understand and measure the satisfaction of patients and their families with the quality of care that they receive.

Success through Collaboration

Many of CPQR’s objectives for the next five years are aligned with those of ASTRO and the American Association of Physicists in Medicine. It will be important to capitalize on the strong collaborative relationships that already exist between the radiation treatment communities in Canada and the U.S. to develop comprehensive, integrated quality assurance programs. Cross representation on key leadership committees engaged in quality initiatives and joint engagement around common programmatic

themes, such as ensuring compatibility of technical quality control procedures and the development of incident reporting and learning systems that span international boundaries, will accelerate the pace of these initiatives and amplify the benefits.

A Model for Radiation Treatment Quality and Safety

The CPQR model, built from the ground up by professionals engaged in the day-to-day delivery of radiation treatment, has fostered a renewed national culture of quality and safety and empowered individual cancer programs to evaluate internal procedures and drive quality improvement. This model is applicable to other jurisdictions as well, recognizing that a coordinated approach to harmonizing radiotherapy quality improvement will ultimately lead to safer and more effective treatment on a global scale.

For more information, visit the CPQR website at www.cpqr.ca.

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Jeff Cao, MD, MBA, is a radiation oncologist at the British Columbia Cancer Agency in Vancouver, British Columbia and the inaugural CPQR Fellow. He has played a central role in developing the next version of the CPQR document, Quality Assurance Guidance for Radiation Treatment Programs, to be released in September 2013.

Michelle Nielsen, MSc, is a medical physicist at the Peel Regional Cancer Centre in Mississauga, Ontario, chairman of the Quality and Radiation Safety Advisory Committee of COMP and a member of the CPQR Steering Committee.

Caitlin Gillan, RT(T), BSc, MEd, is a radiation therapist at the Princess Margaret Cancer Centre in Toronto, an assistant professor in the department of radiation oncology at the University of Toronto and a member of the CPQR Steering Committee.

Michael Milosevic, MD, is a radiation oncologist at the Princess Margaret Cancer Centre, a professor in the department of radiation oncology at the University of Toronto and chairman of the CPQR.

COURAGE *unmasked*

RADIATION MASKS-TURNED-ART HELP
RAISE FUNDS FOR CANCER PATIENTS

BY BRITTANY ASHCROFT, COMMUNICATIONS MANAGER, BRITTANYA@ASTRO.ORG



"Athena's Owl" by Barbara Kerne. "Tree of Life" by Wendy M. Ross. "Shades of Colorado" by Anita Hinders. "I Can See Clearly Now" by Mark Behme. "Lady Arashi" by Janet Barnard. "The Gift" by Joyce Zipperer. "Beauty and the Beast" by Jessica Beels. "To-Do" by Jeanne Garant. "gestation (hope)" by Jacqui Crocetta. "Flight" by June Linowitz. "Tides" by Susanna Giller. "Brain Teaser" by Jessica Beels. ©Ulf Wallin Photography, Ulf Wallin and Chris Birck

turn the page for the story.



What started as radiation treatment for head and neck cancer became one patient's mission to help other cancer patients by transforming radiation masks into works of art.

For six years, Cookie Kerxton's physician told her not to worry about her hoarseness. But a second opinion in January 2008 took Kerxton by surprise when she was diagnosed with vocal cord cancer (glottic cancer).

With a recommendation to see radiation oncologist Gopal (Paul) K. Bajaj, MD, at Inova Fairfax Hospital in Fairfax, Va., Kerxton started radiation therapy. Dr. Bajaj cautioned her about the possible side effects from the treatment: mouth sores, feedings through a stomach tube, and the loss of swallowing ability and saliva, among others.

"I remember the day Paul told me all the things that could possibly happen. And it's pretty scary," Kerxton said.

After anticipating the myriad of side effects she may experience, Kerxton knows she "lucked out," only experiencing a burned neck and some difficulty swallowing. But her lack of side effects also meant she knew others with head and neck cancer had experienced much worse than she did.

"Because she had very early stage larynx cancer, and most of our head and neck patients with more advanced disease are treated with IMRT at a facility around the corner, she probably didn't get to see as many patients, but we had discussed that there are a lot of patients that don't have the social support network," Dr. Bajaj explained.

"The demographic, classically, of head and neck cancer has always been lower socioeconomic class, patients that tend to have long-term exposure to alcohol, tobacco and things like that. So often times these are the patients within your clinic that have the most social needs. They have issues with speech, with swallowing, physical therapy afterward and just lots and lots of costs related to the treatment in terms of getting nutrition, pain medication and other supportive medications."

As she went through her treatment, which used a radiation mask, Kerxton questioned what other head and neck cancer patients did with their masks after their treatments were finished.

"They told me, 'Some people take them home; some people leave them here, and some people run them over with their car,'" Kerxton said.

And that's when Kerxton, an artist, got an idea: turn no longer needed radiation masks into works of art to help those dealing with head and neck cancer. From there, *Courage Unmasked* was born.

"I said, 'I'm an artist, and how would you feel if I asked my friends if they would decorate the masks, and we can auction them off and raise money to help people with their treatment,'" Kerxton said.

The idea was a hit, so Kerxton and others started collecting masks.

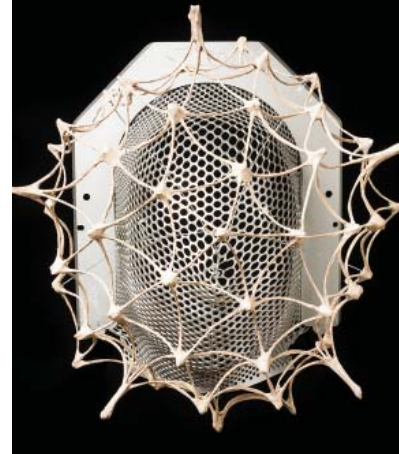
"We would tell patients about the event, and so many of them would say they would be happy to donate their mask," said Dr. Bajaj. "So we went through a collection, and we recruited other radiation facilities in the area. We were able to get the masks without any problem. I'm still sort of perpetually collecting masks."

From there, Kerxton used her connections in the art world to spread the word about the project. The response was overwhelming.

"I was just swamped," Kerxton explained. "I had to turn people down. I didn't know it at the time, but some of these people were really well-known artists."

One of the artists that participated was Jessica Beels, who created a mask in 2009 ("Brain Teaser") and 2012 ("Beauty and the Beast") and found out about the event through an art listserv.

"It was very different from what I usually work with, but one of the things that drew me to the form was that it has an intrinsic mesh form," said Beels, who works in paper sculpture, jewelry, beads and other mixed media. "The material was inviting and durable, but daunting because of what it was. If you donate to something like this [*Courage Unmasked*], it changes your perspective of what you're working on. It gives you an automatic narrative and adds



to the challenge—the materials are challenging and [the materials] give you a form for thinking in a narrative way that's challenging."

After soliciting for artists, the next step for Kerxton was to find a sponsor. "It turned out that one of my best friends was the head of NCCS [National Coalition for Cancer Survivorship], and she said we'll sponsor you," Kerxton said.

That sponsorship, combined with all of the efforts of Kerxton and those around her, resulted in the inaugural Courage Unmasked event in September 2009. Held at the Katzen Arts Center at American University in Washington, the event featured 108 masks transformed into art and auctioned off to more than 500 guests, grossing \$130,000.

"Cookie had this vision that she wanted," Dr. Bajaj said. "The fact that she pulled off that event [Courage Unmasked] is really remarkable because you don't see that a lot day to day.

"But Cookie is the most determined patient I've ever met in terms of getting it off the ground. She has so much gumption, and she's fearless in terms of walking up to people and saying, 'I need money from you.'"

The proceeds from the event helped establish 9114HNC (Help for Head and Neck Cancer), which was sponsored by NCCS from 2009 to 2011, and has since received 501(c)(3) status. The organization grants funds to head and neck cancer patients with financial need in the greater metropolitan Washington area and also works to raise awareness of the needs of head and neck cancer patients and to educate about vaccine preventable cancers, especially with the increase in human papillomavirus (HPV)-associated diseases.

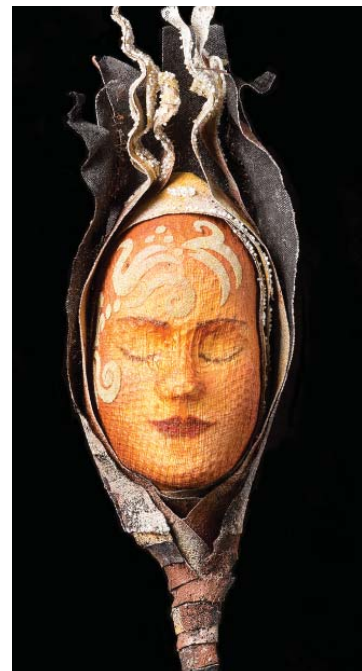
"There's this epidemic now of patients with HPV-associated disease. Probably about 60 percent of the patients I see in our head and neck clinic are patients with HPV-associated disease," Dr. Bajaj explained. "People who never had exposure to tobacco, just social alcohol consumption, and these patients are presenting with advanced cancers at a relatively young age.

"I find myself having to educate the pathologists, the surgeons, the medical oncologists that this is a new entity and we need to be aware of it. So that's part of the mission of the organization as well—to educate."

With the success of the first Courage Unmasked, the group organized a second event. Courage Unmasked 2, held in September 2012 at the Katzen Arts Center, auctioned 59 masks, grossing \$80,920. The success of both events has allowed 9114HNC to provide \$50,000 in grants to 100 patients for expenses not covered by insurance.

As word about Courage Unmasked and 9114HNC has spread, the organization has discussed where it goes next—from planning another Washington-area event to expanding geographically and reaching new patients outside its current scope.

"I think that there's certainly a place to have a Courage Unmasked in New York City and San Francisco and Dallas and Chicago and other large cities," Dr. Bajaj said. "It's just a matter of people finding out about it as a unique way to take this radiation experience and turn it into something positive and have that result go directly back to the patients. There's so few things that we do that really are capable of doing that." *Continued on Page 34*



CONTINUOUS CERTIFICATION

What's in a Name, and What Does It Mean for You?

BY THIS TIME, all radiation oncology diplomates of the American Board of Radiology (ABR) who are participating in the Board's Maintenance of Certification (MOC) program should be aware of the basic parameters and four essential elements of the program, how they function and their various timelines.

After digesting all of the MOC rules and requirements, it may have come as something of a surprise to many diplomates that in 2012, the program had undergone a number of significant changes. These current modifications of MOC really impact program reporting more than essential requirements, and while at first glance they may appear significantly changed, they are designed to make the entire MOC process easier and more advantageous for diplomates. To better identify the new process for all stakeholders, the terminology "Continuous Certification" (ConCert) has been officially adopted by the ABR.

A variety of external factors produced a clear need for revision of the framework of MOC timelines and reporting. The most significant were

the public reporting initiative of the American Board of Medical Specialties (ABMS) and the congressionally legislated linkage of MOC to the Centers for Medicare and Medicaid Services' (CMS) Physician Quality Reporting System (PQRS), codified in the Patient Protection and Affordable Care Act (PPACA) of 2010, which provided a Medicare payment bonus for MOC participation.

In March 2013, the ABMS began reporting on its public website (www.certificationmatters.org) whether or not each ABR diplomate is meeting MOC requirements for each certificate held. ABMS has been reporting the MOC status of diplomates of several of its 24 Member Boards since 2011. Soon, the MOC status of every diplomate of all 24 Member Boards will be reported.

The three public reporting categories that may be attributed to each diplomate listed on the ABMS website are:

- Meeting the requirements of MOC.
- Not meeting the requirements of MOC.

- Not required to participate in MOC (for lifetime-certified diplomates).

The ABMS website also refers users to the ABR website (www.theabr.org), where further information regarding certification status can be found. The ABR's website has been enhanced to include its own online verification database of ABR diplomates, which became available in March 2013.

With the specific inclusion of MOC in the PPACA and eligibility for Medicare bonus payments as part of the PQRS, the definition of "meeting the requirements of MOC" became somewhat problematic within a 10-year activity reporting regimen. To meet the need for evidence of current MOC participation, ABR certificates no longer have "valid-through" dates. Instead, on each new and renewed certificate, the effective date is noted and accompanied by the statement that "ongoing validity of this certificate is contingent upon meeting the requirements of Maintenance of Certification."

This change was necessary because conceivably, during the previous 10-year MOC cycle, a diplomate could be "participating" in MOC but have



| MOC YEAR | LOOK-BACK DATE | ELEMENT(S) CHECKED |
|-----------------|------------------------------|-----------------------------------|
| 2012 | 3/15/2013 | Licensure* |
| 2013 | 3/15/2014 | Licensure* |
| 2014 | 3/15/2015 | Licensure* |
| 2015 and beyond | 3/15 of each subsequent year | Licensure, CME/SA-CME, PQI, Fees* |

*Examination status of each diplomate is reviewed annually for purposes of reminders, but the examination is taken only once in each 10-year cycle.

Continued on Page 28

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| ELEMENT | COMPLIANCE REQUIREMENT |
|---------------------|---|
| Licensure | At least one valid state medical license |
| CME | At least 75 Category 1 CME credits in previous three years |
| Self-Assessment CME | At least 25 of the 75 CME credits must be Self-Assessment CME credits |
| Exam | Passed ABR Certifying or MOC exam in previous 10 years |
| PQI | Completed at least one PQI project in previous three years |
| Fees | Current with MOC fees at any time during the previous three years |

fulfilled none of the program's requirements for five or more years. To remain parallel with actual programmatic requirements, elements of the existing MOC program required changes compatible with the new public reporting status. The boards have also taken note of the risk inherent in a 10-year cycle: as diplomates approach the end of their 10-year window, they might fall so far behind in completing their requirements that they are at serious risk of losing certification.

Under the new continuous certification regimen, diplomates will automatically receive annual reports from the ABR updating their program status and indicating their progress toward completion of their MOC targets. In addition, diplomates can check their new myABR account at any time to see where they stand in terms of completing MOC requirements (<https://myabr.theabr.org>).

In parallel with the diplomate's personal report, the ABMS will be provided with a "record of participation" that will allow for accurate public reporting of the diplomate's correct MOC status. Timing of MOC reporting will thus be more appropriately aligned with the two- to four-year cycle needs of various payers, as well as institutional and external credential-

ing agencies including TJC (formerly known as the Joint Commission for Accreditation of Healthcare Organizations), state medical boards and CMS.

CMS rules regarding PQRS incentive payments for MOC refer to a practice assessment completed within the reporting year, and CMS mandates evidence of increased MOC activity within the reporting cycle. For example, CMS requires one practice assessment in every reporting year, but MOC alone requires one in each three-year rolling look-back period.

For ABR diplomates who decry what they perceive to be just another change in MOC, be assured that Continuous Certification really represents a change in timing of evaluations, not in the quality or quantity of requirements for basic Maintenance of Certification. The new reporting mechanism should enable diplomates to accurately track their program performance and prevent late-stage panic because of lapses in participation and concerns regarding their inability to meet the requirements and a potential loss of certification.

ABMS Member Boards were empowered to establish their own continuous certification guidelines within certain general guidelines, and the ABR considered a number of options for the new program. The Board

ultimately selected a three-year rolling program with an annual look-back to determine if requirements of MOC parts 1, 2 and 4 have been met. For the first complete look-back in March 2016 only, the look-back will be for the previous four years, to prevent loss of credits toward MOC fulfillment earned in 2012.

To clarify, the principal changes in the program are reporting based and not programmatic requirements:

- **Part 1** – Requirements remain unchanged, necessitating that the diplomate hold a current and unrestricted license in the state of practice and in any other states where licenses are held.
- **Part 2** – In the three years preceding the annual look-back, the diplomate must have completed a minimum of 75 category 1 CME credits, of which 1/3 (25 credits) must be self-assessment CME (SA-CME).
- **Part 3** – The MOC cognitive examination process remains unchanged, as a 10-year look-back, but in the revised program, diplomates may take the examination at any time. Regardless of when they elect to take the examination, that specific cycle will reset to require passing another examination within the next 10-year period.

- **Part 4** – At some time within the three-year look-back period, at least one PQI project must have been completed.

If diplomates do somehow fall behind and the annual look-back finds them not meeting MOC requirements, a built-in “catch-up” period of one year allows for the time to make up missing requirements while still being classified as “certified, not meeting the requirements of Maintenance of Certification.” When diplomates make up their requirements, they will again be reported as “meeting the requirements of Maintenance of Certification.” Diplomates who have not met the requirements after the catch-up year has passed will be reported as “not certified.”

The ABR will honor older certificates with “valid-through” dates; diplomates with these certificates who do not meet MOC requirements will

be reported as “certified, not meeting requirements of Maintenance of Certification” until their certificates expire. No diplomate will be reported as “not certified” at any time as long as his or her certificate is valid.

When non-time-limited (lifetime) certificate holders enroll in MOC, they will receive a “letter of MOC enrollment” as soon as they complete the application process, and they will be reported on the ABMS and ABR websites as “meeting the requirements of MOC.” When they meet their first requirements in March of their fourth year of MOC participation, they will be issued an MOC certificate. Their first look-back for the MOC exam will be in their 10th year. If they do not meet requirements, their status will revert to “not required to participate in MOC.”

Additional details of the MOC program and the continuous

certification changes are available on the ABR website (www.theabr.org), and each MOC participant can access additional details related to their own progress through their myABR account at <https://myabr.theabr.org>. Non-time-limited certificate holders wishing to participate in the MOC program may find additional information regarding the process and a link to the voluntary application at www.theabr.org/moc-ro-faq#life.

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Dr. Bosma is the associate executive director for administration at the ABR.



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ONCOLOGY MEASURES GROUP REDUCES BURDEN OF PARTICIPATION FOR RADIATION ONCOLOGISTS

THE CENTERS FOR MEDICARE AND MEDICAID SERVICES (CMS) has approved an Oncology Measures Group for the 2013 Physician Quality Reporting System (PQRS) program. Initially proposed by ASTRO and the American Society for Clinical Oncology, the Oncology Measures Group will significantly reduce the burden of participation in PQRS for radiation oncologists.

PQRS, created in 2007 by Congress as the Physician Quality Reporting Initiative (PQRI), is a voluntary Medicare reporting program that provides financial incentives for satisfactorily reporting data on quality measures for fee-for-service Medicare beneficiaries. The 2013 incentive payment is 0.5 percent of all Medicare Part B physician fee schedule-covered professional services. Beginning in 2015, there will be a 1.5 percent penalty for non-participation in PQRS. The penalty will be based on 2013 reporting. With this looming penalty, ASTRO urges all members who have not previously participated in PQRS to implement the program in their practice. The option of the Oncology Measures Group makes the proposition of participating in PQRS much more manageable.

Understanding the Basics of the Oncology Measures Groups

For the measures group, the provider only needs to report on 20 unique patients, a majority of which must be Medicare fee-for-service to be eligible for a bonus. This sample size

is significantly smaller than what is required when reporting on individual measures. When physicians report on individual measures, reporting must be on 80 percent of eligible instances (patients for whom the measure applies) on at least three measures.

Oncology Measures Group

- 71 – Breast Cancer: Hormonal Therapy for Stage IC-IIIC Estrogen Receptor/Progesterone Receptor (ER/PR) Positive Breast Cancer
- 72 – Colon Cancer: Chemotherapy for Stage III Colon Cancer Patients
- 110 – Preventive Care and Screening: Influenza Immunization
- 130 – Documentation of Current Medications in the Medical Record
- 143 – Oncology: Medical and Radiation – Pain Intensity Quantified
- 144 – Oncology: Medical and Radiation – Plan of Care for Pain
- 194 – Oncology: Cancer Stage Documented
- 226 – Preventive Care and Screening: Tobacco Use: Screening and Cessation Intervention

The sample of at least 20 patients must meet the following patient sample criteria: patients aged 18 years and older, have a specific diagnosis of cancer and are accompanied by a specific patient encounter, which varies depending on the measure.


What if All of the Measures Do Not Apply to My Patients?

For the Oncology Measures Group it is possible that all measures within the

group will not be applicable to all eligible patients. For example, if a provider sees a male patient who is not experiencing pain, the provider would not report measure #71 (Breast cancer) or #144 (Plan of care for pain) as those measures are not “applicable” to that patient. Thus, a provider can still participate in PQRS using the measures group option even if all of the measures do not apply to each patient.

ASTRO PQRIwizard Makes Participation Even Easier

The Oncology Measures Group is a registry-only measures group. This means it cannot be reported via claims and must be reported using a CMS-qualified PQRS registry. The ASTRO PQRIwizard is one such registry. This Web-based tool is easy to use and will increase the likelihood of success. Similar to online tax preparation software, the PQRIwizard helps guide you through a few simple steps to rapidly collect, validate and submit your results to CMS for payment. Participants using registry tools like the ASTRO PQRIwizard have a 95 percent success rate.

More information about PQRS, the Oncology Measures Group and the ASTRO PQRIwizard is available at www.astro.org/Practice-Management/PQRS/Index.aspx. 

RADIATION DRIVEN IMMUNOTHERAPY: BUILDING FOR THE FUTURE



The subject of this edition of Biology Bytes is the advancement of radiation driven immunotherapy (RDI). This is an exciting area of research where evidence is accumulating from various sources that suggest this biological process may have important ramifications for the future of clinical radiotherapy.

CONSIDERED IN ISOLATION, radiation to any particular cell could be anticipated to have a detrimental impact. However, the interplay of tumor cell death, antigen expression, inflammatory signals, lymphocyte and dendritic cell activation presents a therapeutic opportunity. Together, the whole therapeutic effect can exceed the sum of its parts and can present the potential for further improvement of immunotherapy effects arising from therapeutic tumor irradiation to generate immunologic mediated, radiation driven personalized systemic therapy.

The fundamental mechanism of tumor control through radiotherapy is through induction of DNA damage in the neoplastic cells. However, this view is not a complete picture of the time course of cellular events within the tumor. There are associated changes in the microenvironment, tumor associated endothelial cells, inflammatory infiltrates and systemic responses to the tumor destruction. Areas of higher dose exposure inside the bulk of the tumor may have markedly different pathways to cell death, emphasizing necrosis mechanisms. Additionally, the time course of antigen expression changes during the cell-killing process and differences among radiotherapy techniques can be relevant¹.

Several events have been studied for their specific immunotherapy relevance, beyond the phenomenon of cells dying within the radiated tumor. Some of the downstream events relate to inflammation and clearance of antigens within the irradiated volume; those of most interest are those which influence

acquisition of a more activated general or more activated tumor-specific phenotype. The most dramatic outcome is when a distant tumor mass regresses as a consequence of this, known as the abscopal effect. Examples of this are described in case reports²⁻⁴ and preclinical studies⁵, which have led to recently completed clinical trials⁶⁻¹⁰. Other less apparent outcomes as a consequence of the radiation-triggered immune activation include acceleration or completion of definitive clearance of the irradiated tumor or clearance of microscopic or other metastatic disease that was not clinically apparent.

There are abundant opportunities to transform the phenomenon of radiotherapy induced anticancer immune response from the realm of isolated case report into a predictable, directed therapeutic goal. What are the key components to make this a reality? One component is the understanding of how to use systemic therapies to make the host lymphocyte compartment and antigen presenting cell compartments to become primed to be stimulated. Some examples of immune modulators with the potential of having a significant impact on the phenotypes of the dendritic cell compartment include TLR9 agonists¹¹, all *trans* retinoic acid¹², inhibitors of VEGF, TGF-beta or of other cytokines¹³⁻¹⁵. Comparably, stimulation of the lymphocyte compartment with checkpoint inhibitors and cytokines also appears poised to make a significant contribution to clinical practice.

Another component is development of further effective ways to

provide tumor-associated antigen to the immune system. While recombinant vaccines, tumor lysates and synthetic peptides have attributes of convenience and definable antigen sets, they cannot be considered interchangeable with tumor irradiation as a source. Unique features of tumor irradiation include simultaneous elaboration of subtle microenvironmental changes with the capacity to improve antigen presentation, total tumor as a source of antigen, production of radiation-induced antigens and provision of antigen even before overt or immediate cell kill. Further, evolving flexibility of radiation technique, particularly in relation to conventional fractionation, hypofractionation, brachytherapy, stereotactic radiosurgery techniques and high intratumoral dose exposure may be particularly of interest for optimization with respect to the potential to trigger an abscopal response. This may be related to tumor effect, dendritic cell (DC) effect, lymphocyte effects or indirect modulation of the way the tumor is affecting leukocyte compartments.

A third component of interest is cellular therapy, particularly DC injection—many questions about timing with respect to irradiation and details of *ex vivo* preparation remain to be addressed empirically. Optimal host preparation, patient selection and antigen loading could improve outcomes as well. The best volume and number of cells merits empiric study. Finally, as a necessary part of clinical development, there must be some focus on specific diagnoses.

In summary, it is clear that radiation is a modulator of the interaction of the tumor and immune compartments. Careful study of the microenvironment of the irradiated tumor in involution should allow some exciting future opportunities for RDI.

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This article was submitted on behalf of the ASTRO Radiation and Cancer Biology Committee.

THE FOUNDING OF ASTRO

THE CONCEPT OF A NATIONAL SOCIETY within which American radiation therapists (as they were then known) could discuss clinical issues and technology and socialize with colleagues was not entirely new in the 1950s. Most radiotherapists of that era had initially trained as general radiologists. If they were members of a national organization, they belonged to societies such as the American Roentgen Ray Society (ARRS, founded in 1900), the Radiological Society of North America (RSNA, founded in 1915 as the Western Roentgen Society), the American Radium Society (ARS, founded in 1916), the American College of Radiology (ACR, founded in 1923) and the Society of Surgical Oncology (SSO, founded as the James Ewing Society in 1940).

The ARS, the first multidisciplinary oncology society, was perhaps the organization most aligned with the field of radiotherapy. However, with the increasing use of external radiation during the early and mid-20th century, there was a perceived need for an organization specifically for radiotherapists, inclusive of all treatment techniques.

This was, at least, the feeling in 1953 of the 15 members of the North American Chapter of the International Club of Radiotherapists (ICR). At the urging of these members and under the guidance of Juan del Regato, MD, the first meeting of what would become the American Club of Therapeutic Radiologists (ACTR)—and what would eventually become the American Society for Radiation Oncology (ASTRO)—was held in December 1955 during the annual RSNA meet-

ing in Chicago. That first meeting at Barney's Market Club included Dr. del Regato, Gilbert H. Fletcher, MD, Simeon T. Cantril, MD, Milton Friedman, MD, Manuel Garcia, MD, and Milford Schulz, MD, along with several guests. There was consensus among the group of the value in such a gathering, and Dr. del Regato agreed to organize a similar meeting the following year.

Over the following 15 years, meetings were held in conjunction with the annual ARS and RSNA meetings, and the fledgling “club” evolved into a formal national organization with its own scientific session. After the meeting in 1958, pressure gradually grew within the membership to formalize the Club. The first step in this process was official incorporation in 1962 in Colorado, with a membership of 250. Eight years later, the concept of a “Club” was perceived as incapable of addressing the needs of the burgeoning organization. In April 1966, an ad hoc committee, including Drs. Del Regato and Schulz, Malcolm A. Bagshaw, MD, FASTRO, William Powers, MD, and Herman D. Suit, MD, DPhil, FASTRO, recommended the transformation of the Club into a professional society. This was provisionally approved by mail ballot, and approved by the membership in April 1966, changing the name of ACTR to the American Society of Therapeutic Radiologists (ASTR).

Concurrently over this period of time, the scientific knowledge base of radiation therapy grew rapidly. However, radiation therapy-specific presentations fought for time within the large ARS and RSNA meetings.



As a result, in 1969, ASTR decided it was necessary to hold its own, independent scientific meeting. This first meeting was held in November 1970 in Phoenix, with 308 in attendance. The first issue of the *International Journal of Radiation Oncology • Biology • Physics* (Red Journal) made its appearance four years later in 1974. These developments, coupled with the rapid increase in number of radiation therapy residency programs, set the stage for the flourishing of the field of radiation oncology.

Details of the rapid growth, evolution and name changes since 1970 that have led to the Society as we currently know it can be found on the history section of the ASTRO website at www.astro.org/About-ASTRO/Society-History/Index.aspx. For further information, purchase the 50th anniversary book, *ASTRO: A Celebration of 50 Years* at www.astro.org/MyASTRO/Products/Index.aspx or read the Red Journal article, “Synopsis of History of American Society for Therapeutic Radiology and Oncology 1958-2008,” by Gustavo S. Montana, MD, FASTRO, at www.redjournal.org/article/S0360-3016%2808%2902981-7/abstract.

This article was submitted on behalf of the ASTRO History Committee.

SPECIALreport

Continued from Page 8

sial and cutting-edge issues with a patient-centered view. Deborah A. Kuban, MD, FASTRO, and Anthony L. Zietman, MD, FASTRO, will be the co-moderators for this fun and enlightening morning session.

The Annual Meeting Scientific Committee chairman and vice-chairman Lynn Wilson, MD, MPH, FASTRO, and Benjamin Movsas, MD, FASTRO, and the Annual Meeting Education Committee chairman and vice-chairman, Andrea Ng, MD, and Catherine Park, MD, have worked tirelessly to put together a fabulous program for your education and enjoyment. We have a great group of invited speakers and session moderators for a total of 19 panel discussions and 50 educational sessions.

The scientific oral and poster presentations promise to be some of the most comprehensive in ASTRO history with 2,330 abstract submissions. The plenary session will feature the latest in cutting-edge clinical science, and the extremely popular eContouring learning lab sessions will be enhanced. In addition to the scientific and educational program, attendees will again have the opportunity to network with friends and colleagues. Be sure to visit the Exhibit Hall featuring the world's largest exhibition of the latest radiation oncology technologies, services and publications valuable to you and your practice.

Registration is currently open. We look forward to your participation in our Society's 55th Annual Meeting in Atlanta. The meeting promises to be patient centered with exciting research and education for all attendees.

Dr. Lawton is professor, program director and vice-chairman of radiation oncology at the Medical College of Wisconsin in Milwaukee. She welcomes comments on this column at astronews@astro.org.

International Impact

Continued from Page 17

at the Health Care Global Hospital in Bangalore, India, a dedicated cancer center.


During his time there, Dr. Giri worked in patient care with consultants and residents, helped set up a residency program and associated programs, participated in tumor boards and new patient clinics, and helped initiate studies on care delivered as part of outcome reporting.

"The physicians and support staff were very keen on learning and implementing standards," he said.

Dr. Giri has used the lessons learned during his time at the hospital in India in his work with patients in Mississippi.

"There are some similarities between the poor in India and the indigent patients we have in Mississippi," he said. "I have a much better understanding of their needs and the work that needs to be done to ensure timely and equal access to care."

Having put his experience in India into place in the United States, Dr. Giri hopes to go back to India as much as possible to continue his work.

"I would like to believe that I helped in improving patient care, teaching and research. It was a way to give back to India where I received my basic medical training," Dr. Giri said. "Personally, it was extremely satisfying and humbling to work with this group in providing the same high quality care to 'paying' patients and to the poor." 

COURAGEunmasked

Continued from Page 25

While there are no immediate plans for a third Courage Unmasked, Kerxton thinks there is a place for another event to continue the organization's support for head and neck cancer patients.

"The first was a novelty; the second one was lovely and wonderful," Kerxton said. "We have been talking about getting more young people because they are at risk and because they would come to an event because they are art collectors. We'd love to have another one, in another location, another venue, another audience."


Dr. Bajaj would also like to see more radiation oncologists get involved to help the organization expand and reach more patients.

"I see patients every day who confide in me as their physician that they can't make it through the treatment financially or socially. And I can turn to them and say, 'We have avenues for helping you with that,'" Dr. Bajaj

said. "Before Cookie and this fund, I couldn't say anything like that. If every radiation oncologist could sit there and talk to their patients who express this kind of need and say, 'I have a way that I can help you,' that would be great."

While the success of Courage Unmasked and 9114HNC is the work of countless artists, supporters and others, the organization's ability to thrive and help patients stems from the passion of one cancer survivor.

"Cookie is retired, but this fund has become her full-time job that she does out of the goodness of her heart, and it's really amazing," Dr. Bajaj said. "I have to ask myself, 'If I was in Cookie's place, would I be devoting this much time to something like this?' It takes one motivated patient to take something that is literally one man's trash and make it into something that can help. It's really admirable."

For more information on or to donate to 9114HNC, visit www.courageunmasked.org. 

ARTICLE HIGHLIGHTS FROM ASTRO'S JOURNALS

From the April-June 2013 issue of *Practical Radiation Oncology (PRO)*

Catching Errors with Patient-Specific Pretreatment Machine Log File Analysis

by Rangaraj *et al*

Comment

by Kruse and Mayo

PRO is committed to publishing material that emphasizes patient safety. Rangaraj *et al* describe a robust, reliable and efficient QA process to detect errors. Accompanying this article is a related editorial by Kruse and Mayo.

ASTRO's Performance Assessment for the Advancement of Radiation Oncology Treatment (PAAROT): A Practical Approach for Informing Practice Improvement

by Vichare *et al*

This article is the first assessment of PAAROT (version 2.5) data, providing an initial snapshot on the use of quality indicators and practice patterns for radiation oncology. Self-reported practice data and the use of quality indicators will become important for the purpose of continuous, prospective evidence-based learning on an individual basis. Despite the small sample size, the data from this study will help address potential improvement opportunities for the next iteration of PAAROT.

Intensity Modulated Radiation Therapy After Radical Prostatectomy: Early

Results Show No Decline in Urinary Continence, Gastrointestinal or Sexual Quality of Life

by Corbin *et al*

Although postprostatectomy radiation therapy (PPRT) has been shown to improve cause specific survival in select high-risk men, its use may be tempered by the concern for toxicity. Limited data exist regarding the nature of how it may adversely affect quality of life in the era of IMRT. This study shows that compared with baseline, PPRT does not appear to be associated with a significant decline in patient-reported urinary, bowel or sexual QOL indices two years after completion.

From the *International Journal of Radiation Oncology • Physics • Biology (Red Journal)*

April 1, 2013

Subclinical Cardiotoxicity Detected by Strain Rate Imaging Up To 14 Months After Breast Radiation Therapy (RT)

by Erøen *et al*

This study evaluated cardiac function with strain rate imaging before and up to 14 months after breast RT. A significant post-RT reduction in cardiac function was observed for left-sided but not for right-sided patients. Changes were more pronounced in the left ventricular wall receiving the highest dose (anterior wall) compared with the left ventricular wall receiving the lowest dose (inferior wall).

Randomized, Double-Blinded, Placebo-Controlled, Trial of Risedronate for the Prevention of Bone Mineral Density Loss in Nonmetastatic Prostate Cancer Patients Receiving Radiation Therapy Plus Androgen Deprivation Therapy

by Choo *et al*

It is well established that long-term androgen deprivation therapy (ADT) decreases bone mineral density (BMD) and increases the risk of osteoporosis. This manuscript reports a double-blinded, placebo-controlled, randomized study assessing the efficacy of risedronate in preventing BMD loss for non-metastatic prostate cancer patients receiving radiation therapy plus two to three years of ADT. Weekly oral risedronate was efficacious in preventing BMD loss at two years, and generally well tolerated.

Protons in Head-and-Neck Cancer: Bridging the Gap of Evidence

by Ramaekers *et al*

The lack of comparative effectiveness research for innovative radiation therapy techniques makes it challenging to examine cost-effectiveness. Combining normal tissue complication probability models and planning studies with data on costs and quality of life is proposed as feasible and informative to bridge this gap of evidence. The authors argue that if one assumes equal survival for both modalities, intensity modulated proton radiation therapy may be cost-effective compared with intensity modulated photon radiation therapy for selected patients with head-and-neck cancer.

For more article highlights from ASTRO's journals, visit www.astro.org/astronews.
Access these articles and more on the *PRO* website at www.practicalradonc.org
and the *Red Journal* website at www.redjournal.org.

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JOURNALS

May 1, 2013

RTOG 0529: A Phase 2 Evaluation of Dose-Painted Intensity Modulated Radiation Therapy (DP-IMRT) in Combination With 5-Fluorouracil and Mitomycin-C for the Reduction of Acute Morbidity in Carcinoma of the Anal Canal

by Kachnic et al

RTOG 0529 is a phase 2 assessment of the utility of DP-IMRT in reducing the acute morbidity of 5FU/MMC chemoradiation for T2-4N0-3M0 anal cancer. With 52 evaluable patients, the primary endpoint of reducing grade 2 or higher combined gastrointestinal and genitourinary acute adverse events by 15 percent compared with the RTOG 9811 5FU/MMC arm using standard radiation techniques was not met. However, DP-IMRT yielded significant sparing of acute higher grade GI toxicity (grade 3+) and of hematologic and dermatologic toxicity.

Tumor Size on Abdominal MRI Versus Pathologic Specimen in Resected Pancreatic Adenocarcinoma: Implications for Radiation Treatment Planning

by Hall et al

These authors presented a comparison of maximum tumor dimension obtained from 92 preoperative abdominal magnetic resonance images with gross pathologic tumor measurements. They found that abdominal magnetic resonance imaging underestimates gross tumor maximum dimension by a median value of 4 mm. They debate whether or not this has implications for radiation therapy treatment planning.

Imaging Primary Mouse Sarcomas After Radiation Therapy (RT) Using Cathepsin-Activatable Fluorescent Imaging Agents

by Cuneo et al

This group examined the effect of RT on the ability of catheps inactivated fluorescent probes to detect soft tissue sarcoma (STS) in mice. Using a primary mouse model of STS, they showed that RT does not compromise probe activation or cathepsin expression in the tumor. These results support the inclusion of patients who have undergone pre-operative RT in clinical trials assessing the safety and efficacy of cathepsin-activated probes.



ROlupdate

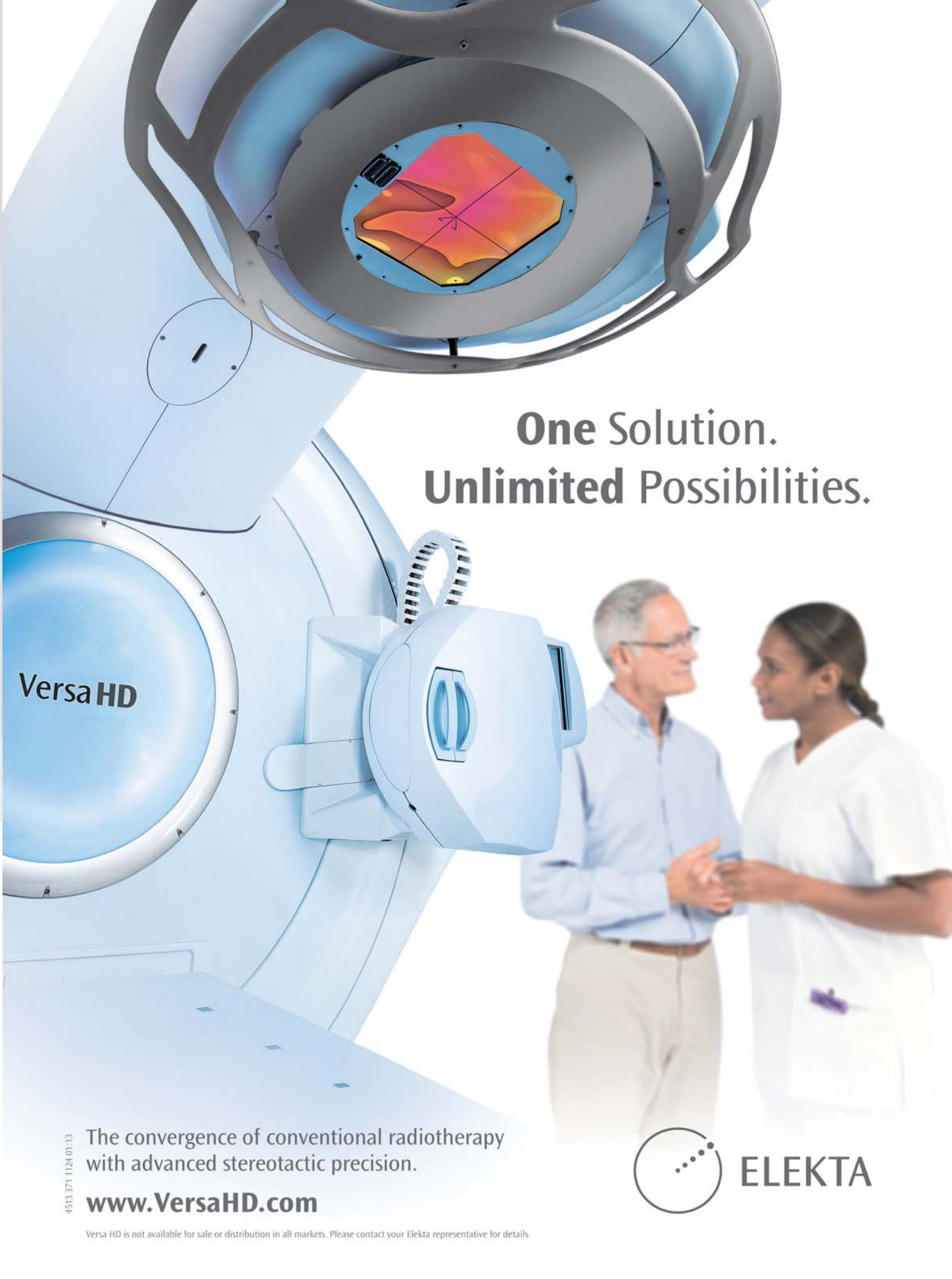
QUALITY MEASURES IN PROSTATE CANCER

Providing systematically collected data to clinicians for quality improvement is one of the global objectives of the newly-formed National Radiation Oncology Registry (NROR). The NROR Pilot Committee developed a “Top Ten” list of quality measures (see Figure 1) specific to radiation oncology in the treatment of prostate cancer. These measures, collectively referred to as radiation practice metrics (RPM), will be the basis for benchmarking reports issued to participating sites on a regular and timely basis. “The RPM will help with benchmarking patterns of care in the real world and by bridging practice-based evidence to evidence-based practice,” said Jason Efstathiou, MD, DPhil, co-chairman of the NROR Pilot Committee.

For more information, contact Maryam Mojarad at maryamm@astro.org or 703-839-7368.

Figure 1: Initial list of RPMs and sources

| RADIATION PRACTICE METRIC (RPM) | REFERENCE |
|--|--|
| Physician board certification and maintenance status | American Board of Radiology Maintenance of Certification |
| Ordering of staging scans: bone, CT, etc. | EUA Guidelines, QOPI, NCCN Clinical Practice Guidelines, NQF |
| Active surveillance discussion | Transatlantic Consensus Group, EAU Guidelines, AUA Guidelines |
| Dose prescriptions for low-risk/high-risk disease | ACR Appropriateness Criteria®, EAU Guidelines |
| Radiation fields for low-risk/high-risk disease | RTOG Consensus Panel Atlas, ACR Appropriateness Criteria® |
| Image guided radiation therapy utilization | Transatlantic Consensus Group, ACR Appropriateness Criteria® |
| Androgen deprivation therapy utilization | EAU Guidelines, AUA Guidelines, NCCN Clinical Practice Guidelines, NQF |
| Post-brachytherapy implant CT dosimetry | ABS Consensus Guidelines, ACR Appropriateness Criteria® |
| Collection of toxicity assessments | NCI CTEP Common Terminology Criteria for Adverse Events 4.0 |
| Longitudinal patient follow-up | EUA Guidelines, ACR Appropriateness Criteria® |



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