Solution to Isotope Shortage Lies in Domestic Production

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- Imaging Biomarkers Used to Screen Breast Cancer Drugs
- Embedded Images in Radiology Reports Improve Communication
- Radiologists Join Social Media Revolution
- Healthcare Reform Deals New Blow with Reimbursement Cuts

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RSNA Editorial Fellows Named

RSNA has named Edward Y. Lee, M.D., a pediatric radiologist at Children’s Hospital Boston and assistant professor of radiology at Harvard University, as the 2010 William R. Eyler Editorial Fellow. The 2010 Trainee Editorial Fellow is Amy M. Fowler, M.D., Ph.D., a resident in diagnostic radiology at the Mallinckrodt Institute of Radiology in St. Louis.

With a special interest in pediatric thoracic imaging, Dr. Lee practices in the Division of Pulmonary Medicine at Children’s Hospital Boston. He is also the radiology chief within several of the hospital’s pediatric pulmonary programs, including the Cystic Fibrosis Center and Center for Healthy Infant Lung Development. He has served as a reviewer for more than 20 journals, has been appointed to the editorial boards of four journals and is an assistant editor of the pediatric section of the American Journal of Roentgenology. Dr. Lee received his medical degree from the University of Chicago. Dr. Fowler has a special interest in breast and women’s imaging and has received grants from the U.S. Department of Defense, National Institutes of Health and Endocrine Society. She has served as a reviewer for the journal Breast Cancer Research. Dr. Fowler received her medical degree and doctorate in cellular and molecular biology from the University of Wisconsin in Madison. Both fellows will work with Radiology Editor Herbert Y. Kessel, M.D., in Boston and Radiographics Editor William W. Olmsted, M.D., in Bethesda, Md. The Eyler fellowship lasts one month and trainee fellowship lasts one week. Each fellow will also visit the RSNA Publications and Public Information Departments at RSNA Headquarters in Oak Brook, Ill. During the final weeks of fellowship, Dr. Lee will work with the RSNA editorial team at RSNA 2010.

Gambhir Receives Honorary Membership in Japanese Society

2010 RSNA President Hidetugu Gambhir, M.D., Ph.D., Dr. h.c., recently received honorary membership in the Japan Radiological Society (JRS). At its annual meeting in Yokohama earlier this year, JRS honored Dr. Gambhir (left, with JRS President Kazun Sugimura, M.D.) for his “great contribution to the field of medical radiology and tireless efforts to promote scientific exchange and cultural understanding between U.S. and Japan.”

Dr. Gambhir is chair of the Department of Radiology at Memorial Sloan-Kettering Cancer Center in New York, a professor of radiology at Cornell University Medical College and an attending radiologist at Memorial Hospital in New York.

Also receiving honorary membership in JRS were Bernd K. Hamm III, M.D., of Berlin and Byung Ilh Choi, M.D., Ph.D., of Seoul, Korea. Dr. Choi became an RSNA honorary member in 2007. Dr. Sugimura will receive RSNA honorary membership at RSNA 2010.

Image Wisely Campaign to Address Radiation Exposure in Adults

RSNA and the American College of Radiology have joined forces with the American Association of Physicists in Medicine and American Society of Radiologic Technologists to create an Image Wisely campaign to raise awareness about limiting radiation exposure in adults.

The increasing amount of radiation to which people are exposed through medical imaging has become the subject of widespread media coverage and public concern, prompting some in the radiology field to call for a comprehensive and targeted response. Image Wisely is the adult counterpart to the Image Gently campaign to limit radiation exposure in children. Image Gently was launched in 2008 by the Alliance for Radiation Safety in Pediatric Imaging, a coalition of more than 40 organizations.

Using the Web and other media, Image Wisely will address CT, nuclear medicine and interventional radiology, including fluoroscopy. Information will be tailored for radiology professionals, referring physicians and patients. RSNA News will report as various aspects of the campaign are unveiled.

Bulas Named SPR President

A change in leadership was announced at the recent annual meeting of the Society of Pediatric Radiology (SPR). SPR’s 2010-11 president, Dorothy Bulas, M.D., is a professor of pediatrics and radiology at George Washington University Medical Center and program director for the Pediatric Radiology Fellowship Program for the Department of Diagnostic Imaging and Radiology at Children’s National Medical Center, both in Washington, D.C. Also pictured is SPR 2010-11 Board Chair Neil David Johnson, M.B.B.S., at the Department of Radiology at Children’s National Medical Center in Cincinnati.

RADIOLoGY IMPACT FACTOR JUMPS

The impact factor for Radiology, RSNA’s peer-reviewed science journal, is now 6.341, according to the recently released 2009 Citations Reports® from the Thomson/Institute for Scientific Information Annual Citation. That is an almost 6 percent rise over the 2008 impact factor of 5.996, and the second highest impact factor in a field of 104 radiology journals. Citations from Radiology totaled 44,847, more than any other imaging journal.

RSNA’s peer-reviewed education journal, RadioGraphics, posted a 2009 impact factor of 7.747. Citations Reports cites more than 7,500 of the world’s peer-reviewed journals in approximately 200 disciplines.


Radiologists’ Response to Concerns about Radiation Exposure Must Put Patients First

This year has seen increasing attention to radiation and radiation oncology accidents involving radiation overexposure. Adverse events captured the attention of the media and prompted the U.S. Food and Drug Administration to conduct hearings. How are we to respond when this happens? By refocusing our attention on patient safety, not just image quality. We need to think first of patients and their effective and cumulative doses and work to protect them from harm. As we seek to improve care by obtaining better, higher resolution images, we must keep in mind that this strategy often results in higher doses to patients. Patient protection from radiation overexposure requires oversight by radiologists, not radiation protection experts, and a strategy for eliminating overexposure and radiation overdose. It is an opportunity for us to be patient advocates and not just equipment companies. It is an opportunity for us to be responsible for image quality and for patients’ effective and cumulative doses. We need to think first of patients and their effective and cumulative doses and work to improve our practice. The potential for saving patients from serious adverse radiation events is real. Having data to understand trends in radiation and track outcomes will continue to help us to justify when imaging studies are truly necessary, as we adopt new methods and procedures in the future.

Radiology’s Olympic Role Evolves


The Olympic Village in Vancouver, however, was not the first to host state-of-the-art radiology services. At the Atlanta 1996 Summer Olympics, MR, digital radiographs and ultrasound were provided at the Polyclinic within the athletes’ village. The Vancouver Imaging Team’s implementation of “on-demand ultrasound” (OVUS) is innovative. Every four years each host city is charged with providing medical care for the athletes and Olympic family. I expect this to set a new standard for radiology services for future Olympic games.

Barbara E. Robertson, M.D.
Editor

Letter to the Editor

Dear Editor:

We apologize for the apparent confusion. As correctly pointed out, MR, digital radiographs and ultrasound were indeed provided at the Polyclinic within the athletes’ village at the Atlanta Summer Games; however, Vancouver was the first Winter Olympics to offer those modalities within the athletes’ village. We agree that innovations like OVUS have again raised the issue of providing medical care at future Olympic games.

Barbara E. Robertson, M.D.

Editor

ACR Awards Gold Medals

RSNA News announces the nominations for Publications and Communications: William T. Thorworth, Jr., M.D., and 2007 RSNA Gold Medal recipient William M. Hendee, Ph.D., received gold medals at the American College of Radiology (ACR) 2010 annual meeting. A nationally recognized expert on radiology economics and reimbursement, Dr. Thorworth has practiced radiology for 25 years with Catarata Radiological Associates in Hickory, N.C. Dr. Hendee is a distinguished professor of radiology, radiation oncology, biophysics and community and public health at the Medical College of Wisconsin in Milwau- kee. He is also the first recipient of the Gold Medal of Innovation, a gold medal to Isaac Sanders, M.D., who served as director of the Residency Training Program, chair of the Department of Radiology and chief of staff at William W. Wroblewski, Jr., Medical Center in Los Angeles, which bestowed Dr. Sanders with Lifetime Staff status in 1999. RSNA dedicated its Annual Awards in Diagnostic Radiology to Dr. Sanders at RSNA 2003.

Grossman Receives Gold Medal

Renowned scientist and educator Robert I. Grossman, M.D., was awarded the gold medal of the International Society for Magnetic Resonance in Medicine (ISMRM) by Queen Silvia of Sweden at the recent ISMRM-European Society for Magnetic Resonance in Medicine and Biology’s joint annual meeting in Stockholm. Currently the Saul J. Farber Dean and CEO of NYU Langone Medical Center in New York, Dr. Grossman received the Javits Neuroscience Investigator Award from the National Institutes of Health in 1999 for his work on multiple sclerosis. He is past-president of the American Society of Neuroradiology.
Radiologists Join the Social Media Revolution

Before launching the social networking site Pediatric Commons in 2009, Michael D’Alessandro, M.D., found himself in the same somewhat isolated position as many other radiologists whose interaction with other clinicians has waned considerably since the advent of PACS.

Now 400 members strong, the educational social network for pediatricians and pediatric radiologists (www.pediatriccommons.org) has opened up a whole new world of information sharing—cases, videos, ideas—for clinicians from across the globe who might not otherwise have ever interacted.

“I get to see interesting pediatric cases that we never see in the U.S.,” said Dr. D’Alessandro, a professor of radiology and a pediatric radiologist at the University of Iowa Children’s Hospital in Iowa City. “I am amazed at the high level of discourse among members, including discussions annotated with citations of the literature and the acknowledgement of legitimate differences in practice management.”

Social media—defined as websites driven by user participation and user-generated content, such as blogs, networking sites like Facebook and the Del.icio.us bookmarking site—are offering radiologists new ways to network, interact and stay connected to each other and the general public.

About 60 percent of U.S. physicians are actively using social media networks or are interested in doing so, according to an early 2009 survey published by Manhattan Research and reported by The New England Journal of Medicine Career Center.

What’s Out There?

Social media, once perceived as the franchise of attention-seeking teens sharing pictures and bands to each other and the general public. There’s a definite need for healthcare workers to provide information to the public,” said Vijay Sadasivam, M.D., a radiologist practicing in southern India and author of the popular blog “scan man’s notes.” “And this is where social media can help.”

Sadasivam created projects like Yottalook, the radiology-specific search engine that powers myRSNA®, and Wiki forums, such as the one utilized by RadiologyInformatica to provide information on radiologic procedures and the role of radiologists in medical imaging and interventional radiology.

Myths Cleared as Specialty Promoted

“Medical professionals should provide accurate information, either from their own life and work experience or via links to appropriate repositories.”

Another blog, Science-Based Medicine (science-basedmedicine.org), includes radiology in its mission to dispel ungrounded medical myths, debunk pseudo-scientific therapies and help readers understand the basic scientific process. Witten and edited by a team of physicians, Science-Based Medicine also has a site, Quackwatch, with a “Quackometer” that enables users to scan websites for dubious language.

“Myth-busting is full of mis- or disinformation peddled by snake oil merchants,” Dr. Sadasivam said. “Medical professionals should provide accurate information, either from their own life and work experience or via links to appropriate repositories.”

Physicians Advised to Tread Carefully

Seeing misinformation propagated can give physicians one more reason to join social conversations, but some experts caution physicians against jumping in too quickly. While social media opportunities are seemingly endless, so are potential HIPAA violations and other abuses of the patient-physician relationship.

“There’s a definite need for healthcare workers to provide information to the public,” said Vijay Sadasivam, M.D.

Continued on Page 8

FANS FLOCK TO RSNA’S SOCIAL MEDIA SITES

While continuing to expand its social media presence, RSNA offers members, friends and fans the following resources:

- myRSNA (www.mysrnsa.rsna.org): This customizable radiology desktop application features a sophisticated search engine, file storage and sharing capability free to RSNA members. The site is password-protected.
- RSNA on Facebook (www.facebook.com/RSNA): Fans post news, scientific articles, alerts about grants and educational opportunities, and updates from RSNA and beyond.
- RSNA on Twitter (twitter.com/rsna): Follow “tweets” to the latest radiology news and offerings from RSNA followers.
- RSNA on LinkedIn (linkedin.com): Click “Groups” to locate RSNA’s professional networks with more than 70 million members.
- Radiologyinfo.org™: This public information website co-founded by RSNA and the American College of Radiology informs and educates the public about radiologic procedures and the role of radiologists in healthcare and improves communications between physicians and patients. The site recently launched a Facebook page at Facebook.com/RadiologyInfo.

A sampling of other noteworthy radiology networks, resources and blogs include:

- Radiopolis (www.radiopolis.com): An international radiology network/community that connects people worldwide interested in radiology.
- Radiopaedia (www.radiopaedia.org): The Wiki-based radiology resource allows users to browse thousands of articles and illustrative cases or get involved and edit or add content.
- Daily Dose (radiologyimages.blogspot.com): Images and discussion offered by a consultant radiologist in the UK.
- Dalai’s PACS Blog (d adolescent.blogspot.com): This site from “an average radiologist in an average practice in a average town in the south,” suggests an alternate acronym for PACS: “Pain and Constant Suffering.”
- Not Totally Rad (nottotallyrad.blogspot.com): Known for “Shielding Light on Invisible Imaging,” the blog was founded by anonymous interventional radiologist, the Samurai Radiologist.

There’s a definite need for healthcare workers to provide information to the public.”

Vijay Sadasivam, M.D.
Embedded Images in Radiology Reports Improve Communication

Embedding images of certain pertinent findings into radiology reports improves efficiency and communication between radiologists and referring clinicians and can improve patient care, according to researchers from Massachusetts General Hospital in Boston.

Referring physicians in the retrospective study published in the March 2010 issue of the Journal of the American College of Radiology were shown text-only reports followed by the same reports which included embedded images of relevant findings. Of the 35 cases referred for abdominal CT in the study, referring physicians reported that 32 text-only reports answered clinician queries satisfactorily. But the reports with embedded images helped clinicians make more confident management decisions and saved time.

A questionnaire included in the study showed consultations with radiologists would decrease by 50 percent if embedded-image reports were used. “That was one of the most important findings,” said lead author Veena R. Iyer, M.B.B.S. “In all cases, physicians found that embedded-image reports saved time, even for a consultation.

In two cases, one of the participants said that the management plan was modified after viewing the images embedded in the report. “Had the referring physician just seen the text report only and not come down for a consultation, they would not have changed the management plan ultimately chosen for the patient,” Dr. Iyer said.

“But seeing the images changed their management decisions,” he said. “That was surprising, for sure.”

Potential Disadvantages Recognized
Viewing the embedded images could also have had the reverse effect in terms of management decisions, Dr. Iyer said. “Sometimes a non-radiologist may skip over important findings in the text and make an inappropriate management decision based on the images alone. That could be a lasting negative impact on radiologists’ perceived value as interpreter and consultants, and radiologists themselves might unwittingly play a role.”

Another potential downside of using embedded-image reports is diminishment of the radiologist’s role.

“I am concerned that radiologists will shorten their reports, relying on images with arrows and circles to demonstrate where abnormalities are located, rather than words,” said Kenneth Buckwalter, M.D., a professor of radiology in the Department of Radiology and Imaging Sciences at Indiana University and a member of RSNA’s Professionalism Committee.

“I am hoping that this won’t come to pass, as it would decrease the value of the report and turn the radiologist into an image markup specialist. It may also further insulate the radiologist from the clinician, which could potentially more radiology into a full-blown commodity.”

Although it’s possible that embedded images could reduce consultations between referring doctors and radiologists—who are already experiencing dis-integration in face-to-face communication—that was not the intent of the study, Dr. Iyer said. “We don’t want that face-to-face interaction to actually break down too much,” Dr. Iyer said. “It’s already waning slightly, but we do not want it to go away. Consultations can be very useful interactions for radiologists as well as for the referring clinician.”

Communication is Focus of RSNA 2010 Course
To foster communication between referring physicians and radiologists, RSNA 2010 will offer a refresher course, “What the Referring Physician Needs to Know” (see sidebar), featuring a panel of referring physicians discussing communication tools including radiology reports.

One panelist, Robert Bales, M.D., M.P.H., said the study on embedded images is also an important first step in helping primary care physicians. “I might get 20 to 30 reports to sign in a day, so if I read a report, I am scanning it quickly for something specific,” said Dr. Bales, an assistant professor of clinical family medicine at the University of Illinois’ College of Medicine at Rockford and a physician and instructor of clinical family medicine at the University Primary Care Clinic in Mt. Morris, Ill. “To be able to look at specific images would really help me focus on what is important.”

The embedded-image reports would also benefit the patient, because images can go a long way in aiding a physician’s explanation, Dr. Bales said. “The next phase of the study will be to expand the focus groups in number and scope, hopefully beginning with primary care, Dr. Iyer said.

While he is enthusiastic about the idea of embedded images, Dr. Buckwalter stresses that radiologists need to be practical about the implementation and potential downstream effects.

“I believe that this is the right thing to do for patient care, but it needs to be integrated with the review and reporting process to the radiologist doesn’t have more work to do,” he said.

Radiologists Join the Social Media Revolution
Continued from Page 6

Using Internet forums to discuss individual patients—as medical students were reporting doing in a 2009 study published in the Journal of the American Medical Association—is discouraged, as it is against the law. Another potential downside of using embedded-image reports is diminishment of the radiologists’ role.

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“Generally, it’s a question of how specific the advice is,” Dr. Berlin said. “If you have a public website that offers information to the general public, there’s no physician-patient relationship. But if you offer advice to a person who’s asking about their specific condition, you’re tisking establishing a relationship.”

Marketing Opportunities Open Up
Offering advice isn’t always a bad thing, according to Paul Doto, M.D., a diagnostic and interventional radiologist for Naples Radiologists, PA, in Florida, who began exploring Twitter as a potential marketing tool for his practice and has used it more frequently at smartphone applications have become more plentiful.

“My right hand, you can still offer helpful advice,” Dr. Doto said. “TE say, ‘This is what I think, but I would still consult with your doctor.’ It’s a lot like a bedside manner—we have to deliver information so the patient isn’t scared to death or at least.”

Dr. Doto said he began using Twitter to share information with patients after seeing the “Follow Me on Twitter” prompt used by marketers. “Patients should know that radiologists are just as much their doctors as primary care physicians,” he said. “With competitive pressure and healthcare reform, it’s important that patients understand that they have choices—and that includes where they go for imaging.”

Social Media Could Become Essential
Social media is likely to evolve from a supplementary information-exchange tool to an essential building block of the Internet, said Gary Choy, M.D., M.C., co-founder of “radRounds.” Users will increase, technical features will become more robust, security will become tighter and social media will share other existing software platforms, he predicts.

“Currently, image sharing is cumbersome with many time-consuming steps,” Dr. Choy said. “Social media can enable simple and faster image sharing, which has the potential to improve patient care. Other imaging software platforms such as online reference tools, reporting systems, radiology information/hospital information systems and scheduling software can also integrate social media tools to improve communication between medical care.”

In the meantime, the social media revolution rolls on—one post at a time.

“While it is sometimes difficult to measure the effectiveness of social media, rest assured it is making an impact in and outside of healthcare,” Dr. Choy said.
Solution to Isotope Shortage Lies in Domestic Production

The worldwide medical isotope shortage will improve as soon as expected, according to nuclear medicine experts who also predict that a long-term solution for the U.S. engineering a domestic source of molybdenum-99 (Mo-99)—could be years away.

Problems began in May 2009 when a heavy water leak detected at Chalk River Laboratory in Canada forced the reactor offline. The restart—anticipated in May 2010—has now been pushed to last summer, according to Robert Atcher, Ph.D., M.B.A., past-president of the Society of Nuclear Medicine and chair of its Medical Isotope Taskforce.

“They’ve saved the most difficult repairs for last,” Dr. Atcher said. Chalk River produced approximately 40 percent of the world’s supply of Mo-99, a byproduct of nuclear fission that is used to create technetium-99m (Tc-99m). Tc-99m is used in millions of nuclear imaging procedures each year, including bone scans to stage cancer patients and myocardial perfusion imaging to detect coronary heart disease.

Matters worsened when another major Mo-99 producer, the Bettis reactor in the Netherlands, closed for repairs in February. It is also expected to remain offline through the summer. These reactors—which together supplied about 65 percent of the world’s supply of Mo-99—are two of the five aging nuclear reactors on which the world’s supply of medical isotopes depends. The others are in Belgium, France and South Africa.

The latest addition to the global supply chain for medical isotopes, the Czech Nuclear Research Institute’s reactor located near Prague, recently entered into an agreement to supply Mo-99 to Lantheus Medical Imaging. The potential of two other reactors in Australia and Poland remains unknown.

Recently licensed by the U.S. Food and Drug Administration for use, the 36-year-old Maria reactor in Poland began producing Mo-99 in April and could supply as much as 5 percent of the world market. However, they would not make a specific commitment to North America, which means it’s possible that the Maria reactor would only supply Europe, Dr. Atcher said.

The Open Pool Australian Lightwater reactor (OPAL) has been developing an expanded Mo-99 production capability but has yet to export any material. Dr. Atcher said. “When it does go online, it could supply 10 percent of the material for the world and about 20 percent of what the U.S. needs,” he said.

Shortage Forces Physician Adjustments

The situation prompted SNM in March to issue recommendations to physicians dealing with the isotope shortage (see sidebar), while continuing to lobby for legislation supporting a domestic source of production of molybdenum-99.

Although the isotope shortage has created a challenge in treating patients, physicians on the front lines say the situation has not been insurmountable thus far.

“Initial fears of a completely untenable situation held by many of us have gone largely unfounded,” Robert Atcher, Ph.D., M.B.A., University of New Mexico

ON THE COVER

A medical isotope production team with Terrapower-based MDS Nordion prepares for the restart of the National Research Universal nuclear reactor in Chalk River, Ontario.

Physicians have become more efficient. They are administering smaller dosages and imaging longer. What we are finding is that the situation varies depending on which vendor the sites use for their radiopharmaceuticals.”

 Added Dr. Appelbaum. “Overall, I am only aware of one or two cases where there has been a true measurable effect on patient care at our institution due to the isotope shortage.”

Legislative, Alternative Production Solutions Sought

Because at least 80 percent of the nearly 20 million nuclear medicine procedures each year in the U.S. use Tc-99m, the U.S. cannot continue to rely on aging reactors in other countries, according to SNM. Chalk River in particular offers a lesson in the dangers of dependence. Not only has it been offline for more than a year, the Canadian government in March rejected the recommendation of its own panel of scientists that Canada build a new reactor to replace Chalk River, which will go offline permanently in 2016. Instead, Canada will invest in emerging technologies and refocus on its domestic needs.

In Washington, legislative solutions are slowly gaining ground. The American Medical Isotopes Production Act of 2010, now before Congress, was crafted to “promote the production of molybdenum-99 in the United States for medical isotope production, and to condition and phase out the export of highly enriched uranium for the production of medical isotopes.”

The bill was passed by the House of Representatives but is stalled in the Senate. The U.S. Department of Energy is also seeking to sell excess highly-enriched uranium that would be repurposed as fuel for nuclear submarines.

Where possible, use alternate radiopharmaceuticals for imaging studies, including:
- Thoridate scintigraphy with iodine-131
- Myocardial perfusion imaging with Tc-99m single photon emission computed tomography (SPECT)

For more information, go to SNM.org

SNM ISSUES RECOMMENDATIONS FOR DEALING WITH ISOTOPE SHORTAGE

SNM recommends taking the following steps to maximize the available isotope supply:

- Coordinate with the generator provider or the central radiopharmacy to align schedules with patients with Tc-99m availability.

- Perform imaging studies throughout the week. Generators produce Tc-99m over weekends—take advantage of the availability of material on Saturdays and Sundays.

- Lower the administered dose and extend the time of imaging in order to continue to collect images with the same statistical robustness. This may also require some adjustment in patient scheduling.

- Where possible, use alternate radiopharmaceuticals for imaging studies, including:
  - Thoridate scintigraphy with iodine-123
  - Myocardial perfusion imaging with Tc-99m single photon emission computed tomography (SPECT)

- Stress-only imaging when appropriate:
  - Thallium-201 SPECT
  - Rubidium-82 PET
  - Coronary CT angiography

- Stress echocardiography

For more information, go to SNM.org

SNM.org

“Promote the production of molybdenum-99 in the United States for medical isotope production, and to condition and phase out the export of highly enriched uranium for the production of medical isotopes.”
Healthcare Reform Deals New Blow with Reimbursement Cuts

While long-term implications remain to be seen, the short-term impact of the sweeping new healthcare reform law on radiology will primarily be felt in the form of the Medicare reimbursement cuts that have long been a bane for the specialty.

“Radiology has been the piñata of Washington for the last five years,” said James H. Thrall, M.D., M.P.H., president of the American College of Radiology (ACR), radiologist-in-chief at Massachusetts General Hospital and a professor of radiology at Harvard Medical School, both in Boston. “This began with the 2005 Deficit Reduction Act (DRA) when the Centers for Medicare & Medicaid Services (CMS) departed from well-established principles for setting reimbursement rates. The current legislation is not based on valid data of any kind.”

The perception that imaging is overutilized and growing too fast has fueled the reimbursement cuts outlined under the 10-year, $940 billion Patient Protection & Affordable Health Care Act that will likely hit radiology harder than other specialties, Dr. Thrall said.

While acknowledging a number of positives, including insurance coverage of an additional 32 million people, improvement to quality reporting incentives and exclusion of the controversial U.S. Services Task Force (USPTF) Mammography Screening Guidelines as a basis for coverage decisions, Dr. Thrall says the 2,000-plus page law also contains considerable drawbacks for radiology.

The legislation includes what Dr. Thrall calls “a two-year window” for self-referral disclosure and offers no permanent fix for the Medicare Sustainable Growth Rate (SGR)—a method used by CMS to control spending by Medicare on physician services—despite widespread concurrence among medical organizations, including ACR, that the formula is flawed.

The legislation also contains grey areas that hang on unknown future decisions by Congress and its rulemaking committees, including the newly created Independent Payment Advisory Committee that could dictate how Medicare reimbursement decisions are made—potentially helping or hurting radiology, according to Jonathan W. Berlin, M.D., M.B.A., associate professor of radiology at the University of Chicago Pritzker School of Medicine. “Around 70 percent of third-party payers base their fee schedule on Medicare, so the potential impact here is enormous.”

Law Could Force Rural Providers Out of Business

Under the law, the utilization rate assumption for medical imaging equipment costing more than $1 million will increase from 62.5 to 75 percent in 2011. The higher the medical assumption rate—the amount of time scanners are presumed to be used during business hours—the lower per scan reimbursement, according to ACR.

While acknowledging a number of positives, most believe the legislation will hit radiology harder than other specialties—primarily in the form of Medicare reimbursement cuts.

“It’s disturbing that we’ve spent the last several decades trying to move medical care delivery to lower-cost outpatient settings for the convenience of the patient and this will drive everything back into hospitals,” Dr. Thrall said.

SGR Keeps Fiscal Future in Flux

The law’s failure to change the SGR formula—which determines the CMS physician payment rate and therefore, Medicare reimbursement—leaves physicians in a constant state of flux.

“All physicians are operating under the constant threat of a possible 21 percent reduction in the Medicare conversion factor, as has been threatened multiple times this year,” Dr. Berlin said. “It demoralizes providers to constantly be on edge about their fiscal future,” Dr. Thrall added.

Although a fundamental restructuring of the formula has long been necessary, a permanent fix—valued at close to $300 billion by ACR—is not likely anytime soon, according to Drs. Berlin and Thrall.

By not permanently fixing the SGR, Congress has guaranteed a flow of political action committee money into its coffers on a permanent basis from medical organizations trying to influence the SGR, Dr. Thrall said.

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While acknowledging the negatives to the law, RSNA’s immediate past-president and Executive Director of the American Board of Radiology (ABR), Gary J. Becker, M.D., points to what he calls a “landmark” addition that stands to benefit patients and physicians: the inclusion of a maintenance of certification (MOC) program incentive.

While incentive payments of 1 percent in 2011 and 0.5 percent from 2012 to 2014 will continue for voluntary participation in Medicare’s Physician Quality Reporting Initiative (PQRI), an additional 0.5 percent incentive payment will be made to physicians who participate in a qualified MOC program, including that of the ABR (see sidebar). The law invokes a penalty for physicians who do not successfully participate in PQRI programs. Beginning in 2015 the penalty will be 1.5 percent, increasing to 2 percent in following years.

“Given that one major goal of the specialty board movement is to maintain for at least a portion of the self-regulation the profession has enjoyed for more than three-fourths of a century, the appearance of MOC in the new federal legislation is a landmark occurrence,” Dr. Becker said.

“Increasing physician accountability and performance assessment and improvement are certainties in our evolving health system. With that perspective, the MOC PQRI provision is tangible evidence that specialty boards will be part of the federal accountability framework in healthcare. Thus, the provision is pivotal to the future of the board movement and the profession itself.”

Congress blinked again, bowing to special interests,” Dr. Thrall added.

“Landmark” MOC Addition Includes Incentive, Penalty

While acknowledging the negatives to the law, RSNA’s immediate past-president and Executive Director of the American Board of Radiology (ABR), Gary J. Becker, M.D., points to what he calls a “landmark” addition that stands to benefit patients and physicians: the inclusion of a maintenance of certification (MOC) program incentive.

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While radiologists concede the sweeping new healthcare reform law signed by President Barack Obama (shown greeting doctors and nurses in the East Room of the White House in March) contains a number of positives, most believe the legislation will hit radiology harder than other specialties—primarily in the form of Medicare reimbursement cuts.

Patients long dissatisfied with the healthcare system overall will also benefit from the MOC provision for physicians. “Ultimately, we will know the public has benefited when MOC participation translates into a ‘Good Housekeeping seal of approval,’” Dr. Becker said.

Long-term Impact Unknown

Overall, Dr. Berlin believes radiology and other specialties were hit hardest by the bill that favored primary care overall, but long-term there is no way of knowing how the massive piece of legislation will impact any area of healthcare. “There are many, many unknowns that will be played out over a number of years,” Dr. Berlin said.

Radiology—and all of healthcare—should brace for what Dr. Thrall calls “unintended consequences” somewhere down the road.

“You don’t experience unintended consequences immediately—they develop over time, after it’s too late,” Dr. Thrall said. “Two examples are the SGR and Medicare Growth rate. Congress has still not found the will or the way to fix either of those.”

RSNA MOC RESOURCES

SUPPORT INCENTIVES OFFERED BY NEW LAW

For more information on the resources RSNA offers to assist with the American Board of Radiology maintenance of certification (MOC) program, go to RSNA.org/Education.

“Radiology has been the piñata of Washington for the last five years.”

James H. Thrall, M.D.
Imaging Biomarkers Used to Screen Breast Cancer Drugs

A $26 million, multicenter clinical trial using molecular imaging biomarkers to help screen promising new drugs in treating breast cancer is now under way at approximately 20 research centers in the U.S.

Launched in March, the Investigation of Serial Studies to Predict Your Therapeutic Response with Imaging and Molecular Analysis 2 (I-SPY II), is a five-year clinical trial that will enroll approximately 800 women with newly diagnosed, locally advanced breast cancer. I-SPY II is led by the Biomarkers Consortium, a public-private partnership comprising the U.S. Food and Drug Administration (FDA), the National Institutes of Health (NIH), and major pharmaceutical companies led by the Foundation for the National Institutes of Health (FNIH).

The groundbreaking clinical trial model uses imaging biomarkers from individual patients’ tumors to test whether adding investigational drugs to standard chemotherapy is better than standard chemotherapy alone before surgery. Researchers will be able to use early data from one set of patients to predict outcomes about which treatments might be more useful for patients later in the trial, eliminating ineffective treatments more quickly.

The I-SPY II initiative grew out of continued frustration felt by researchers, pharmaceutical companies and federal drug regulators seeking a process to rapidly screen promising phase-two agents, according to primary investigator Laura Esserman, M.D., a professor of surgery and director of the Carol Franc Buck Breast Care Center at the University of California at San Francisco (UCSF) Comprehensive Cancer Center.

“We want to increase the likelihood that a drug will be effective in targeted phase-three trials,” Dr. Esserman said. “Right now only about 30 percent of phase-three trials are successful and we’d like to get that number up to 85 or 90 percent. The idea is to identify agents with the potential to be really big winners.”

The trial has the potential to significantly reduce the cost of drug development and speed the process of screening drugs with the goal of bringing safe and effective new drugs to the market more efficiently. Five new investigational agents in development by three major pharmaceutical companies have already been selected for testing in the first part of the trial.

“The trial will further propel the concept of personalized medicine in the area of breast cancer treatment,” Dr. Esserman said. “You can’t personalize medicine until you understand the biology of these tumors and how they respond to which drugs. We think we know, but we’ve learned time and again that isn’t always the case. The point of the trial is to teach us so we can learn how to better personalize treatment.”

Providing a path to personalized medicine, the I-SPY II trial, led by primary investigator Laura Esserman, M.D., (top left) will test the idea of tailoring treatment by using molecular tests to help identify which patients should be treated with investigational drugs. New tools developed by Nola Hylton, Ph.D., (top right) and colleagues in I-SPY-I, will be an integral part of the groundbreaking trial that molecular imaging expert Daniel C. Sullivan, M.D., (bottom right) said could serve as a potential model for speedier trials.

Trial to Test MR Imaging Efficacy

The imaging component of I-SPY II grew out of earlier research conducted by the American College of Radiology Imaging Network and led by Nola Hylton, Ph.D., a professor of radiology and director of the Biomedical Imaging Breast MRI Research Program at UCSF. During I-SPY I, Dr. Hylton and colleagues developed new tools that allow researchers to determine whether using MR imaging to measure tumor volume change can determine a patient’s response to treatment.

In the trial, patients will undergo four pre-operative MR procedures to gather quantitative tumor data, from which researchers will identify treatments that are most effective in specific types of patients. The trial is likely to prove the efficacy of MR imaging as an increasingly essential tool in breast cancer treatment, Dr. Hylton said.

“One of the really important outcomes is that there is clearer evidence showing that MR imaging in this setting is more effective at measuring treatment response than clinical exam or mammography,” Dr. Hylton said. “Not only is it better, but that information is useful in a way that could help to guide individualized treatment. We can feed back the data to improve the technology even further.”

There is widespread interest in I-SPY II as a potential model for speedier trials using fewer patients at ultimately less cost, according to Daniel C. Sullivan, M.D., a professor of radiology at Duke University’s Comprehensive Cancer Center and RSNA’s science advisor.

“This approach is interesting because researchers are using adaptive trial design, which means they will use imaging results to make changes in the trial along the way, while at the same time using outcome data to help evaluate the value of the biomarkers,” Dr. Sullivan said.

“It sounds circular in a sense, which is actually what troubles some people about adaptive trial design,” Dr. Sullivan continued. “However, the trial was designed by very experienced biostatisticians and methodologists. Nevertheless, it is very different from traditional clinical trial methodology, creating caution in some people’s minds about what we can conclude from these types of trials and the firmness of the conclusions.”

While agreeing that there is a certain amount of speculation involved at this stage of the trial, Dr. Hylton stressed that this groundbreaking clinical trial model is on target to strengthen the concept of personalized medicine in breast cancer treatment.

“I fully expect that imaging will represent one piece in a portfolio of tools we can use to individualize the assessment and treatment for breast cancer, as well as the follow-up for individual patients,” Dr. Hylton said.

For more information on the study cited in this article, go to RSNA.org.

A depiction of the assessment of breast cancer treatment response with MR imaging. Patients in the Investigation of Serial Studies to Predict Your Therapeutic Response with Imaging and Molecular Analysis 2 (I-SPY II) trial will undergo four pre-operative MR procedures to gather quantitative tumor data, from which researchers will identify treatments that are most effective in specific types of patients.
“Controversies” articles: This 2009 USPSTF Guidelines Ignore Important Scientific Evidence and Should Be Revisited or Withdrawn

Breast Cancer Screening: From Science to Recommendation

Released in November 2009, the U.S. Preventive Services Task Force (USPSTF) breast cancer screening guidelines recommending against routine mammographic screening for women 40-49 years unleashed a firestorm of controversy that continues to generate heated debate on both sides of the issue. In separate “Controversies” articles in the July 2010 issue of Radiology (RSNA.org/Radiology), Daniel B. Kopans, M.D., of Massachusetts General Hospital and Harvard Medical School in Boston, and Diana B. Petitti, M.D., M.P.H., of Arizona State University in Phoenix, and five fellow task force members offer opposing sides of the issue that is still evoking anger, confusion and division among the public, the radiologic community and medical organizations.

Arguing that the guidelines ignore fundamental scientific issues and evidence, Dr. Kopans outlines nine fundamental errors made by the USPSTF in crafting the guidelines and calls for the revision or withdrawal of the guidelines.

Percutaneous Cryoablation of Renal Tumors: Patient Selection, Technique, and Postprocedural Imaging

Percutaneous cryoablation is an effective choice for the minimally invasive nephron-sparing treatment of renal tumors, and knowledge of normal and abnormal postablation findings is essential for optimal follow-up imaging.

In the July-August issue of RadioGraphics (RSNA.org/RadioGraphics), Brian C. Allen, M.D., and Erick M. Remer, M.D., of the Imaging Institute, Cleveland Clinic, discuss and illustrate percutaneous cryoablation in terms of patient selection and treatment planning, technical aspects (including guidance with ultrasound, CT, and MR imaging), and postablation imaging findings and complications. Specifically, the authors address:

• Advantages of cryoablation over radiofrequency ablation in the treatment of renal tumors
• Expected postcryoablation imaging findings
• Postprocedural imaging features of incomplete cryoablation and disease progression

“Percutaneous treatment is less invasive than other nephron-sparing procedures, is associated with fewer severe complications, and can be performed on an outpatient basis with conscious sedation,” the authors write. “Current limitations include the inability to control hemorrhage without intraarterial access and a lack of long-term follow-up data.”

Acute Appendicitis: Clinical Outcome in Patients with an Initial False-Positive CT Diagnosis

The decision to forgo surgery in patients with CT findings compatible with appendicitis but reassuring surgical evaluation findings often results in missed appendicitis and increased risk of perforation.

In a retrospective study of 2,283 patients with suspected appendicitis who underwent CT between 2002 and 2007, Joseph W. Stengel, D.O., and colleagues from the Department of Radiology at the University of California in San Francisco, reviewed radiographic reports and scored the likelihood of appendicitis on a five-point scale. Results showed that five of 13 patients with CT findings of appendicitis and reassuring clinical evaluation results, for whom immediate treatment was deferred, ultimately returned with appendicitis.

“In patients with CT results positive for appendicitis and benign-appearing medical or surgical findings, a diagnosis of chronic or recurrent appendicitis may be considered,” the authors conclude.

RadioGraphics in Public Focus

Press releases have been sent to the medical news media for the “Controversies” articles (see previous page) and the following articles appearing in the latest issue of Radiology.

Resting-State Perfusion in Nonmedicated Schizophrenic Patients: A Continuous Arterial Spin-Labelling Study

Dr. Petitti and colleagues provide an overview of the USPSTF, explain the process through which the guidelines were issued, and review the evidence considered as well as the actual recommendations. “The USPSTF guidelines ignore many of the scientific facts,” Dr. Kopans concludes. “Their implementation will severely reduce the benefit that has been achieved over the past 20 years, will increase the death rate in the United States, and will set back women’s breast health to the 1950s.” ...

“...Coritagnization of guidelines represents a simplification device required to practically implement what inherently is a continuous function balancing benefits and harms,” Dr. Petitti writes. “For mammographic screening, the net benefits of mammographic screening increase with age, with the greatest absolute benefits among women aged 56–74 years.”

CT images of 68-year-old woman with right lower quadrant pain. Intravenous contrast-enhanced transverse CT image demonstrates findings of acute appendicitis, including an enlarged appendix with a fluid-filled lumen (long arrow) 1.2 cm in diameter. The tubular structure (short arrow) anterior to the appendix is a collapsed loop of small bowel.

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Radiology in Public Focus

Highlight Use of PET/CT

In July, RSNA’s “60-Second Check-up” radio segments will focus on the benefits of using PET/CT to detect disease or other abnormalities and to map heart and brain function.

Media Coverage of Radiology

Continued from Page 16

Radiologists’ “key performance values at subsequent screening mammography according to calendar year. Left y-axis: Sensitivity and specificity. Right y-axis: Recall rate. Values above the < and > symbols are on the left y-axis and values below the symbols are on the right y-axis. (Radiology 2010;256;1:74-82) ©RSNA, 2010. All rights reserved. Printed with permission.

Other Radiology Headlines

Agents for PET Amyloid Imaging Explored

Imaging agents capable of assessing amyloid-beta content in vivo in the brains of people with Alzheimer’s disease (AD) and mild cognitive impairment (MCI) and elderly normal control subjects will prove valuable as surrogate endpoints to assess the efficacy of anti-amyloid therapies, Chester A. Mathis, Ph.D. (right) told attendees of SNM’s Molecular Imaging Symposium this year.

These same agents will also be valuable as diagnostic agents for wayfinding in elderly control subjects who would likely benefit from anti-amyloid therapies and to test the amyloid cascade hypothesis of AD, said Dr. Mathis, a professor of radiology, pharmacology and pharmaceutical sciences at the University of Pittsburgh and director of the university’s PET facility. Dr. Mathis also holds the inaugural PET Research Endowed Chair at the university medical center and received SNM’s 2010 Paul C. Aebischer Award.

The symposium brought together multiple scientific disciplines to focus on advances in targeted multimodality imaging of the central nervous system, including imaging of the blood-brain barrier, tumors, neuroreceptors, stem cells and adoptive immunotherapies. Presented by SNM’s Molecular Imaging Center of Excellence, the symposium was co-sponsored by RSNA, the Society for Molecular Imaging, the National Institute for Neurological Disorders and Stroke and the National Institute of Biomedical Imaging and Engineering.

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RSNA News

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Real Estate, Retirement are Focus of RSNA 2010 Financial Seminars

Navigating challenging economic times requires an evolving financial strategy and updated tools to stay ahead of the curve. Real estate and retirement planning goals are especially critical during the ongoing economic crisis, according to two experts scheduled to present financial seminars at RSNA 2010.

“The recent economic crisis has spurred new legislation, problems and opportunities which directly affect your planning process and financial security,” Rubenstein said. The seminar includes comprehensive illustrations and essential information to help physicians and their families decide how to plan their estates and distributions from retirement plans, and use asset protection techniques.

These seminars do not qualify for AMA PRA Category 1 Credit™. Additional fees apply and you must be registered for RSNA 2010 to enroll.

To register, go to RSNA.org/register. For more information, contact the RSNA Education Center at 1-800-381-6668 87772 or e-mail us at info@rsna.org.

RSNA Advanced Course in Grant Writing

Applications are now being accepted for this course designed to help participants, generally junior faculty members, prepare and submit a National Institutes of Health (NIH), National Science Foundation (NSF) or equivalent grant application by the October 2011 deadline. The course, to be held at RSNA Headquarters in Oak Brook, Ill., will consist of four midday sessions: October 15-16; January 29-30, 2011; March 25-26, 2011; and May 20-21, 2011.

For more information and an application, go to RSNA.org/Research/educational_courses.cfm or contact Fiona Miller at 1-630-590-7741 or fmiller@rsna.org.

Medical Meetings

August – October 2010

<table>
<thead>
<tr>
<th>Date</th>
<th>Event</th>
</tr>
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<tbody>
<tr>
<td>AUGUST 11-19</td>
<td>American Society of Emergency Radiology (ASEER) Annual Scientific Meeting, Grand Hyatt Seattle • <a href="http://www.aseer.org">www.aseer.org</a></td>
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<tr>
<td>SEPTEMBER 8-11</td>
<td>Academy of Molecular Imaging (AMI), 2010 World Molecular Imaging Congress, International Conference Center, Kyoto, Japan • <a href="http://www.amic2010.org">www.amic2010.org</a></td>
</tr>
<tr>
<td>SEPTEMBER 12</td>
<td>European Symposium on Urological Radiology, Vandenberghe Congress Center, Oud Sint-Jan, Bruges, Belgium • <a href="http://www.esur2010.be">www.esur2010.be</a></td>
</tr>
<tr>
<td>SEPTEMBER 23-26</td>
<td>Australasian Society for Ultrasound in Medicine (ASUM), Gold Coast Convention Centre, Queensland, Australia • <a href="http://www.asum.com.au">www.asum.com.au</a></td>
</tr>
<tr>
<td>SEPTEMBER 26-29</td>
<td>Radiology Business Management Association (RBMIA), Full Educational Conference, Renaissance Austin Hotel, Austin, Texas • <a href="http://www.rbmia.org">www.rbmia.org</a></td>
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For Your Benefit

RSNA DISCOUNTS PRICES ON BUNDLED REFRESHER COURSES

For a limited time, RSNA is offering discount pricing on select refresher courses from past annual meetings. The three-CD Pancreas Collection (BUN01) and Thyroid Collection (BUN03) are specially discounted at 25 percent off the original bundle price. The discounted price is $90 for members; $130 for non-members.

The offer expires October 31. To order online go to RSNA.org/education/catalog and enter the appropriate BUN number into the Product Code area.

Member Question of the Month

What is your biggest challenge in incorporating new technology on the job?

E-mail us your answer at tellus@rsna.org. Respondents featured in an upcoming issue of RSNA News will receive a small gift featuring the new RSNA logo.

Organizing is Easy with RSNA’s Resident Learning Portfolio

When the University of North Carolina began utilizing RSNA’s Resident Learning Portfolio last year, I immediately decided to participate. The program helps organize academic, research and quality improvement projects, procedure logs and faculty evaluations, which is extremely valuable during residency.

Having access to the program 24 hours a day from any computer allows me to maintain my records with more accuracy. Because the program is online, I am easily able to input data such as my procedure log or add academic or research projects as they happen, keeping me organized throughout my residency. The Resident Learning Portfolio also provides an organized format for sharing information with a program director or a future credentialing body.

Overall, the Resident Learning Portfolio is a great tool for keeping track of many of the components of residency in one convenient site.

For more information, go to RSNA.org/Education/portfolio.cfm

Learning Portfolio Benefits Residents, Administrators

Designed to assist residents and their program administrators with charting educational goals, progress and accomplishments, RSNA’s Resident Learning Portfolio has welcomed more than 100 participating institutions around the world since its 2008 launch in conjunction with the Association of Program Directors in Radiology.

The Web-based resource provides the resident team with a means of refining training goals, communicating expectations, planning and mentoring. The site was also developed to help residents meet Accreditation Council for Graduate Medical Education requirements that all residents maintain an electronic learning portfolio.

To access the Resident Learning Portfolio, members must register with the RSNA Education Center by contacting residents_portfolio@rsna.org. For more information, go to RSNA.org/Education/portfolio.cfm

Research & Education Foundation Annual Donors

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**Annual Meeting Watch**

Enroll Now for Courses

Course enrollment for RSNA 2010 is under way. Online enrollment occurs instantly, while faxed or mailed registration forms are processed in the order they are received. The RSNA 2010 Advanced Registration, Housing and Course Enrollment brochure was mailed in late June and is also available at RSNA.org/register. Use this brochure to make the most of your RSNA 2010 experience. RSNA has organized the information in the course brochure to help you complete your enrollment in just a few steps. Find the courses you need, build your schedule and enroll quickly and easily online or via the print form.

**Guarantee Your Seat!**

Tickets are required for various meeting components, including refresher, multisession and financial courses, workshops and RSNA tours and events.

**NEW AT RSNA 2010:** All ticketed courses must be confirmed prior to November 24 to guarantee a seat. RSNA ticketed courses fill up fast, so ensure you get the courses you need by enrolling at RSNA.org/register. Onsite course ticketing has been eliminated. Registrants without tickets will be allowed entrance into a course after all ticketed registrants have been seated.

**Enter to Win Next Year’s Airfare While Saving This Year**

RSNA attendees who book air travel through Gant Travel by October 1 will be entered into a drawing to receive a $500 (USD) travel credit toward their RSNA 2011 airfare on United Airlines. Benefits of using Gant Travel for RSNA 2010 include:

- Up to a 15 percent discount on available fares on United Airlines
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- Emergency assistance available by phone

For more information, contact Gant Travel at 1-877-613-1192, international +1 011 630-227-3873 or RSNA@ganttravel.com.

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<td>There are four ways to register for RSNA 2010:</td>
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<tr>
<td>1 INTERNET</td>
<td>RSNA/AAPM Member</td>
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<tr>
<td>Go to RSNA.org/register</td>
<td>RSNA Member-in-Training, RSNA Student Member and Non-Member Student</td>
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<tr>
<td>2 FAX (24 hours)</td>
<td>Non-Member</td>
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<tr>
<td>1-800-521-6017</td>
<td>Non-Member Resident/Trainee</td>
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<tr>
<td>1-847-996-5401</td>
<td>Radiology Support Personnel</td>
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<tr>
<td>3 TELEPHONE</td>
<td>Non-Member Radiologist, Physician</td>
</tr>
<tr>
<td>(Mon.-Fri. 8:00 a.m. – 5:00 p.m. CT)</td>
<td>Hospital or Facility Executive, Commercial Research and Development Personnel, Healthcare Consultant and Industry Personnel</td>
</tr>
<tr>
<td>1-800-450-7018</td>
<td>One-day registration to view only the Technical Exhibits</td>
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<tr>
<td>4 MAIL</td>
<td>Important Dates</td>
</tr>
<tr>
<td>Express/RSNA 2010 568 Armit Drive</td>
<td>October 22</td>
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<td>Vernon Hills, IL 60061 USA</td>
<td>November 5</td>
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<td>Nov. 28 – Dec. 3</td>
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For more information about registering for RSNA 2010, visit RSNA2010.RSNA.org, e-mail reginfo@rsna.org or call 1-800-391-6660 x7862.

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**Set Your Sights with My Chicago Trip Planner**

My Chicago Trip Planner, a new tool offered by the Chicago Convention and Tourism Bureau, helps RSNA 2010 attendees create siteseeing itineraries based on their unique needs and interests. Access My Chicago Trip Planner at choose.chicago.com/RSNA.

Based on demographic information you provide about yourself, your travel companions and your stay in Chicago, along with your indicated interests—such as art, sports or theater—My Chicago Trip Planner will search hundreds of activities to build a possible itinerary. Activities added to the itinerary include links to more information, including a map.

After you’ve refined your itinerary, you can save it, download it or e-mail it to friends and family. RSNA will once again offer a series of exciting tours and events during RSNA 2010. Registration is under way at RSNA.org/register.

**City of Chicago Offers Sweet Deals**

The City of Chicago offers RSNA 2010 attendees amazing deals on everything from restaurants and shopping to entertainment and attractions. Take advantage of Sweet Deals, Chicago, and enjoy these exclusive offers when you use any American Express® Card at participating merchants. For more information, go to www.choosechicago.com.

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**RSA News**

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**New Brand Suite Aids Understanding of Billing Process**

Medical Management Professionals (www.chicagmp.com) announces MMPact, a new brand suite that provides radiologists with a more in-depth understanding of complex billing processes. MMPact billing service describes and organizes front- and back-end billing steps that MMP defines as service marked products. Each product within the service is a step within the billing cycle that offers a unique blend of technology and people to impact revenue, and includes vendor-partnered and proprietary software combined with MMP’s expert team of professionals.

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**Telemedecine, Mobile Products Offer Real-time Capability**

Foresight Imaging (www.tims.com) introduces the TIMS Consultant, a networked system that allows clinicians at various locations to view and participate in a live medical or diagnostic imaging procedure. Participants have full annotation and telestration capability to emphasize or highlight areas of the live video stream and can use multiple video sources and clients. In addition, the new TIMS Mobile Consultant allows physicians to view live diagnostic imaging procedures or surgical camera video on mobile smart phones.

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**New Product**

**Soft Tissue Probe Allows In Vivo Imaging**

Michelson Diagnostics (www.md-ltd.co.uk) announces a probe suitable for imaging soft tissue, for use with its VivoSight Multi-Beam optical coherence tomography (OCT) imaging system. The probe allows in vivo imaging of oral and gynecological tissue.

The VivoSight Multi-Beam OCT system provides subsurface cross-sectional images at a higher resolution than is possible with ultrasound, CT or MR imaging. Much deeper and wider than is possible with confocal microscopy. The new soft tissue probe provides the same unprecedented imaging quality as the topical probe, with real-time, in vivo images at better than 7.5 µm lateral resolution. The probe is 9 cm long and provides both 2D and 3D images over a 5 mm x 5 mm area. For sterile applications, the probe is used with a disposable transparent sheath which covers the probe, handle and upper connecting cable.

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**NEW PRODUCT**

**FDA CLEARANCE**

Imaging System Used for Radionuclides

Hydride Imaging Technologies (www.hydrideimagingtechnologies.com) has received FDA clearance for ProvScan®, a system used in imaging the distribution of radionuclides in the human body using planar imaging techniques. ProvScan may also be used intraoperatively, on pathological specimens and for endocavitary applications, if a protective sheath is used. ProvScan is also capable of high-performance imaging of radiopharmaceuticals distributed within anatomical regions of interest located close to the camera head.

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RSNA.org

Accessing RSNA’s extensive educational offerings is now as easy as logging onto myRSNA.

Education Resources a Click Away on myRSNA

While the Education portal at RSNA.org/education continues to offer the same roster of free online member resources, users can now customize, organize and track education resources and content from one easy-to-access location. By clicking the new myEducation tab on myRSNA, members can utilize:

- **Online Offerings**: Based on subspecialty, users can access Refresher Course and Cases of the Day from RSNA annual meetings, online-self-assessment modules (SAMs), RT@Graphix articles and syllabi from past RSNA courses.

- **mySearch-for CME**: The new Point of Care (PoC) learning tool allows members to research procedures while earning CME credit at the same time.

- **myCME Credits**: Users can track current and completed courses for any year beginning in 2016, access RSNA education products in the Education Center store and utilize the CME Gateway, which allows users to view, print or generate reports of CME credits from multiple societies.

myRSNA Webinar Covers Education, Search Functions

For a free tutorial on the new myEducation component of myRSNA, members are invited to participate in the webinar led by RSNA own developers.

The one-hour Webinar, set for 1 p.m. CDT on Tuesday, Aug. 17, will also cover the updated mySearch function. Members can call the toll-free number (U.S./Canada) at 1-866-469-3239 or the toll number (U.S./Canada) at 1-650-429-3200. The meeting number is 796 12 719 233. RSNA offers Web tutorials every three months. For more information, go to myRSNA.org.

COMING IN AUGUST

From its world-class museums and bustling theater scene to its delectable dining and sizzling nightlife, Chicago offers a stellar lineup of attractions sure to please everyone attending RSNA 2010. Next month, RSNA News will spotlight a full roster of Chicago events including our Insider’s Guide to Chicago’s Best Deals featuring many of the free activities available in the Windy City.

RSNA News

| NEWS YOU CAN USE |

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Tapping Into MR Imaging’s Potential to Find Viable Brain Tissue After a Stroke

Thanks to an RSNA R&E Foundation research grant, Dr. Copen gained protected time to develop techniques and software tools for MR-based measurement of cerebral oxygen metabolism, which may substantially widen the window of opportunity to save patients’ lives with intravenous thrombolytic therapy.

William Copen, M.D.
Department of Radiology
Massachusetts General Hospital
R&E Grant Recipient

Since 1984, the RSNA Research & Education Foundation has enabled the brightest minds in radiology and related sciences to discover new methods to fight disease, devise sophisticated new technologies, improve the patient care process and cultivate the workforce of the future.