



Under the Magnifying Glass: MOC Changes Increase Transparency, Streamline Certification

ALSO INSIDE:

- fMRI Aids in Identifying, Treating Major Depression
- Economic Boom Aids Brazilian Radiology
- Automated Breast Ultrasound Has Potential for Widespread Use
- Radiologists Cautiously Optimistic About Next Meaningful Use Phase

RSNA Career Connect™

WHERE RADIOLOGY PROFESSIONALS
AND EMPLOYERS CONNECT

Job Seekers

FREE!

- Post your resume
- Receive e-mails with jobs tailored to you
- Search specific sub-specialty positions
- View new job postings daily

Employers

**Great
Low
Rates!**

- Post jobs immediately
- Access our growing resume database
- Get added exposure through linked sites
- Receive applicant e-mail notifications



CONNECT TODAY AT:

RSNA.org/career

RSNA Career Connect™

RSNA News™

For more than 20 years, *RSNA News* has provided high-quality, timely coverage of radiology research and education and critical issues facing the specialty, along with comprehensive information about RSNA programs, products and other member benefits.

EDITOR

David M. Hovsepian, M.D.

**R&E FOUNDATION
CONTRIBUTING EDITOR**

C. Leon Partain, M.D., Ph.D.

EXECUTIVE EDITOR

Lynn Tefft Hoff

MANAGING EDITOR

Beth Burmahl

EDITORIAL ADVISORS

Mark G. Watson
Executive Director

Roberta E. Arnold, M.A., M.H.P.E.
*Assistant Executive Director
Publications and Communications*

Marijo Millette
*Director: Public Information and
Communications*

EDITORIAL BOARD

David M. Hovsepian, M.D.
Chair

Colin P. Derdeyn, M.D.

Kavita Garg, M.D.

Bruce G. Haffty, M.D.

Nazia Jafri, M.D.

Bonnie N. Joe, M.D., Ph.D.

Edward Y. Lee, M.D., M.P.H.

Kerry M. Link, M.D.

Barry A. Siegel, M.D.

Gary J. Whitman, M.D.

William T. Thorwarth Jr., M.D.
Board Liaison

GRAPHIC DESIGNERS

Adam Indyk

Ken Ejka

CONTRIBUTING WRITERS

Mike Bassett

Richard Dargan

Mary Henderson

Paul LaTour

2012 RSNA BOARD OF DIRECTORS

N. Reed Dunnick, M.D.
Chair

Ronald L. Arenson, M.D.
*Liaison for Annual Meeting
and Technology*

Richard L. Baron, M.D.
Liaison for Education

William T. Thorwarth Jr., M.D.
*Liaison for Publications and
Communications*

Richard L. Ehman, M.D.
Liaison for Science

Vijay M. Rao, M.D.
*Liaison-designate for Annual
Meeting and Technology*

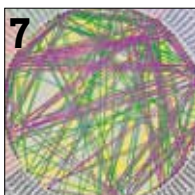
George S. Bisset III, M.D.
President

Sarah S. Donaldson, M.D.
*President-elect and
Secretary-Treasurer*



UP FRONT

- 1 First Impression
- 3 RSNA Board of Directors Report
- 4 My Turn



FEATURES

- 5 Under the Magnifying Glass: MOC Changes Increase Transparency, Streamline Certification
- 7 fMRI Aids in Identifying, Treating Major Depression
- 9 Economic Boom Aids Brazilian Radiology
- 13 Radiologists Cautiously Optimistic About Next Meaningful Use Phase



RADIOLOGY'S FUTURE

- 11 Automated Breast Ultrasound Has Potential for Widespread Use
- 15 R&E Foundation Donors



NEWS YOU CAN USE

- 17 Journal Highlights
- 18 *Radiology* in Public Focus
- 19 Education and Funding Opportunities
- 20 Technology Forum
- 20 Residents & Fellows Corner
- 21 Annual Meeting Watch
- 23 The Value of Membership
- 24 *RSNA.org*



Access the *RSNA News* tablet edition on the App Store and Android Market.



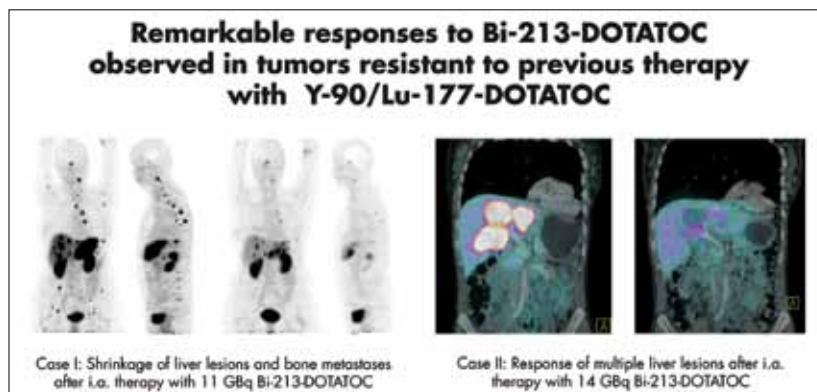
Follow us for exclusive meeting news, annual meeting offers and more!

Society of Nuclear Medicine and Molecular Imaging is New Name for SNM

The Society of Nuclear Medicine (SNM) is now the Society of Nuclear Medicine and Molecular Imaging, after a vote by the membership.

“Over the past five years, SNM has made a concerted effort to embrace other modalities that, like nuclear medicine, utilize the tracer principle,” said George Seagall, M.D., immediate past-president. “The name Society of Nuclear Medicine and Molecular Imaging retains our rich history and identity while recognizing the growing diversity in our field. Retaining nuclear medicine as part of the society’s name also recognizes the therapeutic, medicinal aspects of nuclear medicine.”

Also announced at the society’s recent meeting was the Image of the Year, exemplifying the most cutting-edge nuclear medicine or molecular imaging research today demonstrating the ability of molecular imaging to detect and diagnose disease and help select the most appropriate therapy. This year’s image illustrates the effectiveness of Bi-213-DOTATOC for the peptide receptor alpha-therapy of gastroenteropancreatic neuroendocrine tumors (GEP-NETs) that do not respond to beta therapy. “These show the remarkable results that can be achieved in a clinical setting,” said Peter Herscovitch, M.D., chair of the society’s Scientific Program Committee. “This opens up a new door for those patients whose GEP-NETs do not respond to more standard radiotherapy.”



Formerly the Society of Nuclear Medicine (SNM), the Society of Nuclear Medicine and Molecular Imaging has named its Image of the Year (above), which illustrates the effectiveness of Bi-213-DOTATOC for the peptide receptor alpha-therapy of gastroenteropancreatic neuroendocrine tumors (GEP-NETs) that do not respond to beta therapy.

Numbers in the News

3

Physician interpretation time, in minutes, with 3D-automated breast ultrasound (ABUS). Turn to Page 11 to learn why some experts are calling this screening alternative a “game changer.”

6

Brazil’s place in a 2012 ranking of the world’s largest economies. Healthcare expansion is part of the country’s growth and radiology plays a pivotal role with its technology, research and demand for personnel. Learn more and get a preview of the RSNA 2012 Brazil Presents session on Page 9.

13

CME credits available to be earned in each issue of *RadioGraphics*. Turn to Page 23 to learn about all that the premier education journal, one of many RSNA member benefits, has to offer.

40

Percent of radiologists responding to a recent survey who cited concerns about either the lack of clarity in meaningful use guidelines or decreased efficiency as a result of adopting the guidelines. See Page 13 to learn more about the revisions that radiology informatics experts are seeking to ensure that meaningful use incentives truly apply to radiology.

Bisset Awarded SPR Pioneer Honor

RSNA President **George S. Bisset III, M.D.**, was awarded the Pioneer Honor at the Society for Pediatric Radiology’s (SPR) recent annual meeting in San Francisco. Dr. Bisset is chief of pediatric radiology at Texas Children’s Hospital and Edward B. Singleton professor of radiology at Baylor College of Medicine in Houston. Dr. Bisset has served on numerous RSNA committees over the years.

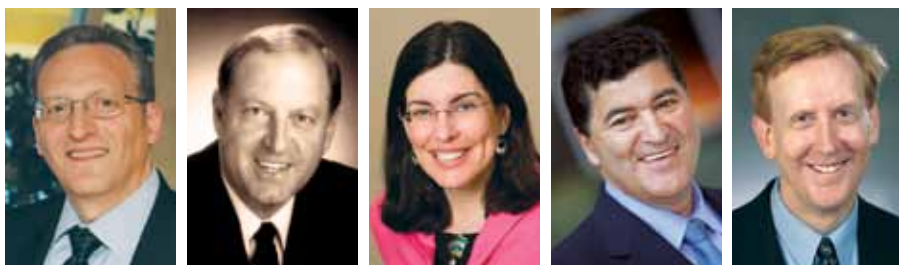


WARD AWARDED CRS GOLD MEDAL

The Chicago Radiological Society (CRS) presented its Distinguished Service Award, or Gold Medal, to **Kathleen A. Ward, M.D.**, an associate professor of radiology at Loyola University Chicago’s Stritch School of Medicine, at its recent annual meeting. The award is the Society’s highest honor.

Dr. Ward was recognized for her outstanding leadership in organized medicine on local, state and national levels and her many years of dedicated service to radiology. She is a past-president of CRS, the Illinois Radiological Society and the American Association for Women Radiologists.





Kahn **Crowe** **Pisano** **Zerhouni** **Gunderman**

ARRS Names Officers, Awards Gold Medals

Charles Kahn Jr., M.D., was named the American Roentgen Ray Society (ARRS) 2012-13 president at the society's recent annual meeting. Dr. Kahn is the director of information and decision sciences and a professor and chief of the Division of Informatics in the Department of Radiology at the Medical College of Wisconsin in Milwaukee. Dr. Kahn serves as vice-chair of the Structured Reporting Subcommittee of the RSNA Radiology Informatics Committee.

Other 2012-13 officers are: **Norman Beauchamp, M.D., M.H.S.**, a professor and chair at the University of Washington Medical Center, Seattle, president-elect; **Melissa Rosado de Christenson, M.D.**, a clinical professor of radiology at St. Luke's Hospital Kansas City, Mo., vice-president; **Bernard F. King, M.D.**, chair of the Radiology Department at the Mayo Clinic, Rochester, Minn., secretary/treasurer.

ARRS gold medals were awarded to **John K. Crowe, M.D., M.S.**, **Etta Driscoll Pisano, M.D.**, and **Elias Zerhouni, M.D.** A past-ARRS president, Dr. Crowe is a founding member of Scottsdale Medical Imaging Ltd. in Arizona and holds academic positions at the University of Arizona College of Medicine, Gateway Community College in Phoenix and Yale University School of Medicine.

Dr. Pisano is vice-president for medical affairs and dean at the Medical University of South Carolina College of Medicine in Charleston. She is a member of the RSNA Public Information Advisors Network (PIAN), the Quantitative Imaging and Imaging Biomarkers Task Force and the Margulis Award for Scientific Excellence Selection Committee.

Dr. Zerhouni is president, global research and development and a member of the Executive Committee at Sanofi, a global leader in diversified healthcare solutions. A past director of the National Institutes of Health (NIH), Dr. Zerhouni was nominated by President Barack Obama as one of the first presidential U.S. science envoys in 2009. Dr. Zerhouni was awarded the RSNA Gold Medal in 2010 and was a Eugene P. Pendergrass New Horizons Lecturer in 2007.

The Distinguished Educator Award was presented to **Richard B. Gunderman, Ph.D., M.D.**, vice-chair of radiology and a professor of radiology, pediatrics, medical education, philosophy, liberal arts, and philanthropy at Indiana University in Indianapolis. A member of the Public Information Advisors Network (PIAN), Dr. Gunderman received the RSNA Outstanding Educator Award in 2008 and will deliver an Annual Oration in Diagnostic Radiology, "The Story Behind the Image," at RSNA 2012.

IN MEMORIAM

R. Edward Coleman, M.D.

R. Edward Coleman, M.D., a luminary in the nuclear medicine and molecular imaging fields, died June 29, 2012. He was 69. Dr. Coleman joined the staff at Duke University Medical Center in 1979 as a professor of radiology and was appointed vice-chairman of the Department of Radiology. He had recently completed his 33rd year of service at Duke.



Dr. Coleman is recognized worldwide as a nuclear medicine expert. While completing his fellowship at the Mallinckrodt Institute of Radiology, he helped perform the first human PET studies. He was a founder and first president of the Institute of Clinical PET (ICP) and a president of the Academy of Molecular Imaging (AMI). He brought PET and MR imaging technology to Duke University and worked to bring the technology to hospitals throughout the U.S. and the world.

Dr. Coleman was honored as one of the Best Doctors in the U.S. from 1991 to 2011 and was distinguished as one of America's Top Doctors for Cancer from 2001 to 2011. He was awarded an Honorary Doctor of Science Degree from the University of Evansville in 2000. In 2007, he was awarded the Georg Charles de Hevesy Nuclear Pioneer Award from the Society of Nuclear Medicine. He received the Alumnus Achievement Award from Washington University in 2008 and a Distinguished Alumnus Award from the University of Evansville in 2012.

Dr. Coleman served on numerous RSNA committees, was an associate editor of *Radiology* and a manuscript reviewer for *RadioGraphics*.

ICRU Seeks Nominations for Gray Medal

The International Commission on Radiation Units and Measurements (ICRU) seeks nominations for the 16th ICRU Gray Medal. The Gray Medal, established in 1967, is presented for outstanding contributions to basic or applied radiation science of interest to the ICRU. The medal honors the late Louis Harold Gray, former member and vice-chair of the commission and eminent medical physicist and radiobiologist.

Nominations for the medal may be made by any person or organization and must include complete curriculum vitae of the nominee, selected records that show significant contributions made by the

nominee to medical imaging and letters of support evaluating the importance of these contributions. Nominations must be received by Sept. 30, 2012, and should be directed to:

Chairman of the ICRU
Suite 400, 7910 Woodmont Ave.
Bethesda, MD 20814, USA

For more information call 301-657-2652, Ext.31, or email icru@icru.org.

RSNA Board of Directors Report

At its June meeting, the RSNA Board of Directors approved the Society's 2012-2013 budget, continued planning for the annual meeting and reviewed reports from RSNA committees regarding educational activities and technology development.

RSNA 2012 Still Evolving

With plans for RSNA 2012 well under way, programs are still being added. A new special interest session will look at the upcoming changes to the process by which the Accreditation Council for Graduate Medical Education accredits residency programs, including the “milestones” by which resident progress will now be judged. A separate RSNA 2012 pilot invites selected authors of backboard education exhibits to also submit an electronic version of their posters; meeting attendees will scan QR codes placed on the backboard poster to access the electronic version and supplemental materials.

Returning to this year's RSNA annual meeting is a popular session where enrollees are given tumors to contour in advance of the meeting and then compare their work to that of experts who contour the same tumors during the course. This year the American Society for Radiation Oncology will co-sponsor the sessions, which are part of the Bolstering Oncoradiologic and Oncoradiotherapeutic Skills for Tomorrow (BOOST) program.

Also new at RSNA 2012 will be Mobile Connect, a special area of RSNA Services where attendees can learn how to get the most out of their mobile devices. Attendees will also have a chance to learn about RSNA mobile offerings, including member-only mobile benefits, and to submit ideas for improving RSNA apps.

To be named at RSNA 2012 are the first recipients of the new RSNA Honored Educator program, designed to recognize those who make significant contributions to the educational content offered by RSNA on an annual basis.

RSNA DxLive™ Expands

Another popular annual meeting feature, RSNA DxLive™—technology unveiled at RSNA 2011 that allows participants to use their personal digital devices to submit case diagnoses in a game format—is being integrated into resident training programs as part of a pilot at Thomas Jefferson University in Philadelphia, Brigham and Women's Hospital in Boston and the University of California, San Francisco. At RSNA 2012 the DxLive technology will support select refresher courses in addition to the case diagnosis competition sessions.

QIBA Scope Grows

The Quantitative Imaging Biomarkers Alliance, created by RSNA to unite researchers, healthcare professionals and industry stakeholders to advance quantitative imaging and the use of imaging biomarkers in clinical trials and practice, has expanded its scope to include ultrasound and specifically shear wave speed liver elastography. Previously formed committees continue to focus on CT Volumetry, COPD/Asthma, perfusion/diffusion/flow-MRI, fMRI and FDG-PET.



N. Reed Dunnick, M.D.
Chairman, 2012 RSNA
Board of Directors

RSNA Centennial Looms Large

The Board approved a variety of events and materials to commemorate RSNA's Centennial, a year-long celebration which begins with the Society's 100th annual meeting in 2014 and continues through RSNA 2015. Watch *RSNA News* and other RSNA communications for more information about how you can participate in the celebration. Have historical photos or other memorabilia to share? Contact us at centennial@rsna.org.

Former RadioGraphics Editor Honored

The Board approved renaming RSNA's editorial fellowship for trainees in honor of William W. Olmsted, M.D., who retired in 2011 after 22 years as editor of *RadioGraphics*. Beginning in 2013 the fellowship will be known as the RSNA William W. Olmsted Editorial Fellowship for Trainees. See more information on Page 18.

N. REED DUNNICK, M.D.
CHAIRMAN, 2012 RSNA BOARD OF
DIRECTORS



At RSNA 2012, DxLive™ personal device technology will support select refresher courses in addition to the case diagnosis competition sessions.

My Turn

Why MOC Matters to You

Fast forward seven and a half years. It is 2020, and you have just received notice from your administrative assistant that your application for renewal of hospital privileges has stalled. After a little investigation at the medical staff office, you discover the problem: you are “not meeting the requirements of Maintenance of Certification (MOC).” What happened?

A great deal has happened, and it began with the public's expectations of physicians, superimposed on a broader movement of transparency and accountability—a movement which encompasses government, business, banking, education and many more fields of endeavor, including medicine. As a result, meeting the requirements of your specialty board's (American Board of Radiology, or ABR) MOC program has become the new ground floor, entry criterion for credentialing and delineation of clinical privileges. Let's examine how and why this happened.

Although the public is a bit fuzzy on the precise meaning of board certification, 95 percent say it is important and two-thirds say it is very important. In a 2003 Gallup Poll, board certification ranked second only to bedside manner (91 percent versus 95 percent) among factors in choosing a doctor. In a 2010 Opinion Research Corporation survey, 78 percent of respondents stated they would be bothered if their doctors chose not to maintain certification.

Through the years, the ABR's purposes have been to: 1) establish standards for the safe and competent practice of diagnostic radiology, radiation oncology and medical physics; 2) evaluate candidates for certification; and 3) inform the public

about who has—and by inference, who has not—met the requisite standard for certification in these disciplines and the subspecialties. Similarly, a robust MOC program must inform the public about who is/is not demonstrating a commitment to lifelong professional development by meeting the requirements of MOC. Accordingly, the American Board of Medical Specialties (ABMS) has established online reporting on a diplomate-specific basis as a standard that all member boards, including the ABR, must implement within the near future.

For those who regard these developments as too rapid, too radical or even misguided, consider that:

- More than 150 online physician/hospital rating and report card services now exist due to public demand.
- The Centers for Medicare and Medicaid Services' (CMS) future vision of Physician Compare (launched in 2011) is that of a sought-after resource, rich with individual data describing physician performance in practice.
- The National Association of Medical Staff Services (NAMSS) has taken notice of the reporting of MOC status and is now considering procedures for annual verification of MOC status of every diplomate.

- The Joint Commission, various health plans and CMS also have taken notice of ABMS' standard for public reporting of MOC status; for example, CMS incorporated MOC requirements into the Physician Quality Reporting System for incentive reimbursement.

Finally, meeting the requirements of MOC is the right thing to do, as it demonstrates one's dedication to the primacy of patient welfare, a fundamental principle of professionalism, as well as to the 10 commitments of the Physician Charter on Medical Professionalism in the New Millennium. If you plan to practice more than another year or two, then you, your patients and your colleagues will all be best served by your participation in MOC.

Gary J. Becker, M.D., is executive director of the American Board of Radiology. Dr. Becker served as RSNA president in 2009.



For a full report on this issue, read “Under the Magnifying Glass: MOC Changes Increase Transparency, Streamline Certification,” on Page 5.

RSNA/ESR/ACR Launch First International Day of Radiology

RSNA, the European Society of Radiology (ESR) and the American College of Radiology (ACR) will launch the first International Day of Radiology (IDoR) on November 8, the anniversary of the discovery of X-rays by Wilhelm Conrad Röntgen, Ph.D.

Based on the European Day of Radiology launched by ESR in 2011, the International Day of Radiology is meant to build greater awareness of radiology's value and contributions to patient care and medical outcomes, to highlight radiologists' essential role in the healthcare continuum. The main topic for IDoR 2012 will be oncologic imaging with special focus on the role of radiology in patient safety and optimizing radiation dose.

A video, press kit and brochures/booklets on the history of radiology and on oncologic imaging will support the International Day of Radiology.

For more information, contact Marijo Millette at mmillette@rsna.org or 1-630-590-7727.

RSNA News

September 2012 • Volume 22, Number 9
Published monthly by the Radiological Society of North America, Inc.
820 Jorie Blvd., Oak Brook, IL 60523-2251. Printed in the USA.

POSTMASTER: Send address correction “changes” to: *RSNA News*, 820 Jorie Blvd., Oak Brook, IL 60523-2251

Non-member subscription rate is \$20 per year; \$10 of active members' dues is allocated to a subscription of *RSNA News*.

Contents of *RSNA News* copyrighted ©2012, RSNA. RSNA is a registered trademark of the Radiological Society of North America, Inc.

LETTERS TO THE EDITOR

rsnanews@rsna.org
1-630-571-7837 FAX

SUBSCRIPTIONS
subscribe@rsna.org
1-888-600-0064
1-630-590-7770

REPRINTS AND PERMISSIONS

permissions@rsna.org
1-630-571-7829
1-630-590-7724 FAX

ADVERTISING

advertise@rsna.org
Jim Drew, Director
1-630-571-7819

RSNA MEMBERSHIP
1-877-RSNA-MEM



Under the Magnifying Glass: MOC Changes Increase Transparency, Streamline Certification

As part of a broader movement to increase transparency throughout healthcare, the American Board of Medical Specialties (ABMS) has begun a reporting initiative that will impact all of its member boards, including the American Board of Radiology (ABR).

SINCE August 2011, ABMS has reported on its public website, *certificationmatters.org*, whether physicians certified by seven of its 24 member boards are meeting ABMS Maintenance of Certification® (ABMS MOC) program requirements. In the near future, ABR-certified diagnostic radiologists, radiation oncologists and medical physicists also will be reported on the ABMS website as “meeting requirements of MOC,” “not meeting requirements of MOC” or “not required to participate in MOC.”

In tandem with the public reporting initiative, ABR has implemented a new MOC status verification system that will ensure that diplomates remain current in their requirements for certification. Under the new “Continuous Certification” process, certificates will no longer display an end date but will instead state that ongoing certification is contingent on meeting MOC requirements. Lifetime certificate holders are not required to participate in Continuous Certification but are encouraged to do so on a voluntary basis.

ABR has been working on a number of fronts to get the word out about these changes and to implement them seamlessly. “ABR is determined to make this transition as facile and easy as possible,” said Milton J. Guiberteau, M.D., ABR president-elect and an ABR trustee. “We would like diplomates to understand that although this is a change, it’s a change for the better and with their best interests in mind.”

Public Demand Fuels Need for Website

Public reporting has been a long time in coming. Much as public demand for transparency has fueled consumer sites like Angie’s List, patients hungry for information on their own healthcare are pushing for increased accountability from providers.

“Healthcare has been poised for this type of change for some time,” Dr. Guiberteau said. “Public accountability has become part of the national con-



Guiberteau



Becker



Laszakovits

sciousness and healthcare is fast becoming a part of that. It is the duty of our member boards to report this information in a way that is accurate, helpful and most beneficial to our patients.”

Public reporting has already taken hold in many areas of healthcare, said ABR Executive Director Gary J. Becker, M.D. “Report cards on physicians, hospitals, nursing homes and health plans abound,” added Dr. Becker, who served as RSNA president in 2009.

Along with offering transparency, public reporting simplifies the process for consumers who can check a physician’s certification status from one centralized database for all 24 ABMS boards. Dr. Becker stressed that ABR diplomates are responsible for making sure the information on their ABR Personal Databases (PDBs) is accurate and up-to-date. Diplomates may log on at www.abronline.org.

“We need diplomates to go to their PDBs and to the ABMS website and verify their information is displayed correctly and to let us know immediately if there are any discrepancies,” Dr. Becker said. An added incentive to stay on top of MOC certification status: A recent ABMS survey found that 95 percent of Americans say it’s important that their doctors participate in a program to maintain their board certification, while nearly half (45 percent) would look for a new doctor if they learned theirs was not participating in such a program.

“ABR is determined to make this transition as facile and easy as possible.”

Milton J. Guiberteau, M.D., ABR president-elect and an ABR Trustee

ON THE COVER

Public reporting of physicians’ MOC status is part of a larger movement to increase transparency in healthcare.



Continuous Certification Aligns MOC Process

Linking public reporting and continuous certification is critical to standardizing the MOC process that has been something of a patchwork since it was created 12 years ago, ABR leaders said. Because each of the 24 ABMS member boards had separate MOC programs, adopting common standards was necessary to ensure consistency of use for participants and the public.

“With Continuous Certification, every person’s MOC status is more manageable, fewer mistakes are made and the process is streamlined,” said David Laszakovits, ABR’s director of certification services. “This will be especially important as MOC continues to evolve.”

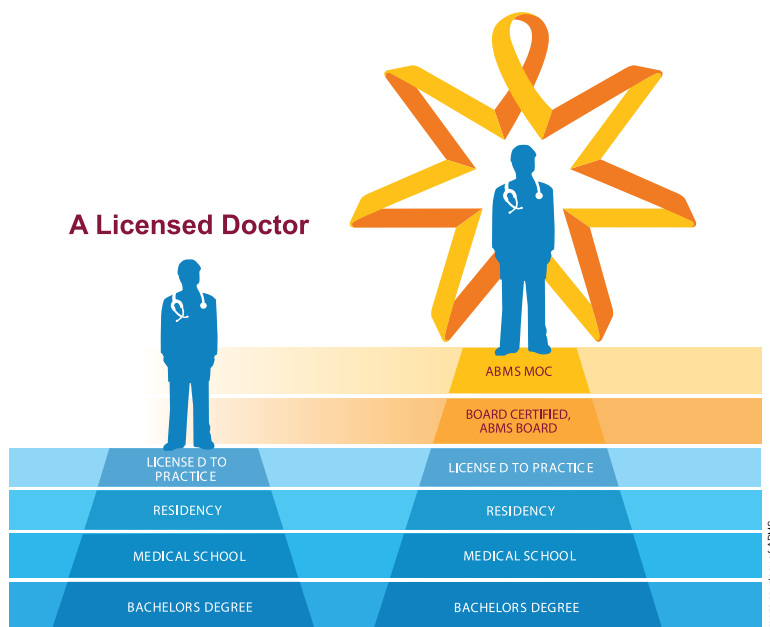
Along with keeping reporting clear and preventing unanticipated changes to the certification status of someone who has fallen behind in requirements, Continuous Certification aligns reporting more closely with programs of the U.S. Centers for Medicare and Medicaid Services (CMS), the Joint Commission, state licensing boards and other institutions.

Instead of the 10-year, time-limited certification for meeting MOC requirements, Continuous Certification uses a look-back period to evaluate all four MOC components and render a diplomate’s participation status. This annual look-back will encompass a yearly check of licensure; a rolling three-year check of CME, SAMs and PQI project completion; and a rolling 10-year check of exam status. All new and maintained certificates will move to the new model this year, while the “valid through” dates on existing certificates will continue to be recognized. The underlying MOC requirements will not change.

ABR leaders say Continuous Certification has a number of benefits, including:

- Two or more time-limited certificates can be synchronized into one MOC cycle.
- Unlimited number of CME credits and SAMs that can be counted per year. Anyone can have an off year or even two, in which it is difficult to complete the required CME, SAMs, and PQI. This new process enables diplomates to compensate by completing more of their requirements in a single year in order to achieve the three-year totals they need.
- MOC exam may be taken at any time, as long as the most recent initial certification or MOC exam was passed no more than 10 years ago.
- During the transition to Continuous Certification, diplomates who have taken and passed the MOC exam will be given a one-time “break” because the date of their exam passage will be attributed to the last day of their 10-year cycle.
- If the annual look-back finds a diplomate not meeting requirements (including passing the MOC exam), a built-in “catch-up” period of one year allows time to make up requirements while still being classified as “certified, not meeting the requirements” of MOC.
- ABR will send automatic reminders to help participants avoid the perils of procrastination and the stress of trying to meet 10 years’ worth of requirements in a short period.

A Licensed Doctor Participating in ABMS MOC



A recent American Board of Medical Specialties survey (ABMS) found that 95 percent of Americans say it’s important that their doctors participate in a program to maintain their board certification, while nearly half would look for a new doctor if they learned theirs was not participating in such a program. Above: Board-certified physicians have completed specialty training beyond the state licensure basic competency requirements to practice medicine.

- Lifetime-certified diplomates will not relinquish their original certification upon enrolling but will receive credit for MOC participation as soon as they complete the application process. When they meet their first rolling three-year look-back requirements for CME, SAMs, and PQI at the beginning of their fourth year, they will be issued an MOC certificate. Their first look-back for passing the examination is in their tenth year.

Additionally, the changes will optimize the MOC program’s potential by eliminating redundant efforts, minimizing busywork and aligning with other external requirements and incentives.

Physicians Should Prepare for More Robust Reporting

RSNA education leaders emphasize the Society’s role in ensuring all members fulfill their MOC requirements and stress the ongoing commitment to supporting RSNA members in maintaining board certification.

“The important work of the RSNA Content Advisory Panel has helped RSNA significantly increase the number of SAMs available online and the RSNA Quality Improvement Committee is working to double by the end of 2012 the size of its library of ABR-qualified PQI projects for use by members in meeting their Part 4 requirements,” said Richard L. Baron, M.D., RSNA Board Liaison for Education. “These resources are all designed to support RSNA members in efficiently fulfilling their MOC requirements and optimizing their personal learning and professional development.”

Continued on Page 12

WEB EXTRAS

📄 Access the American Board of Medical Specialties (ABMS) public website at certification.matters.org.

📄 To read the article, “Is Public Reporting Valuable? Show Me the Evidence!” by Gary J. Becker, M.D., American Board of Radiology (ABR) Executive Director, in the ABR Newsletter, *The Beam*, go to www.theabr.org.

📄 ABR representatives will discuss MOC changes as part of the Bistro RSNA table discussions during lunch hours Monday-Wednesday at RSNA 2012. For more information on RSNA 2012, go to RSNA.org/Annual_Meeting.aspx.

fMR Imaging Aids in Identifying, Treating Major Depression

New research demonstrates that functional MR imaging (fMRI), a dominant brain imaging tool since the early 1990s, is playing an important role in understanding and treating serious depression.

RESEARCHERS in Scotland used fMRI to show how electroconvulsive therapy (ECT) works in treating major depression, while investigators in the People's Republic of China have demonstrated the potential for fMRI to provide effective biomarkers for clinically diagnosing serious depression.

In an article published in the April 2012 edition of the journal *Proceedings of the National Academy of Sciences*, lead researcher Ian Reid, M.B.Ch.B., Ph.D., M.R.C.Psych., a professor of psychiatry at the University of Aberdeen, and colleagues used fMRI to demonstrate how using ECT in depressed patients affects the way that different parts of the brain communicate with each other.

ECT has a long and controversial history. It was first used in the 1930s based on the theory that schizophrenia and epilepsy could not co-exist and that clinicians could “drive out” mental illness by using electricity to induce fits, Dr. Reid said. “Of course, that was entirely mistaken—epilepsy and schizophrenia often co-exist,” he said. “But over time it was determined that ECT could be effective in treating severe depression.”

Yet, Dr. Reid said, no one has ever “pulled together a coherent picture of how ECT works in terms of the knowledge of the etiopathology of depression.”

Dr. Reid and colleagues used fMRI to scan the brains of nine severely depressed patients before and after they received ECT. fMRI and data-driven analysis revealed that ECT reduced the global functional connectivity in the left dorsolateral prefrontal cortical region of the brain in all nine patients. Simultaneously, this reduced connectivity was accompanied by an improvement in symptoms as reported by the patients.

“Essentially, it appears that ECT reduces hyper-connectivity between parts of the brain involved in mood, thinking, concentration and memory,” Dr. Reid said. “If you talk to patients, they will tell you that it does feel like that—like someone has turned down this painful depressive sense after ECT.”

Electroconvulsive Therapy Remains Controversial

Performing ECT requires an anesthetic and a hospital stay and can have potentially serious side effects, including memory loss. Consequently, ECT is recommended only for patients with severe depression who require a fast, responsive treatment, Dr. Reid said.



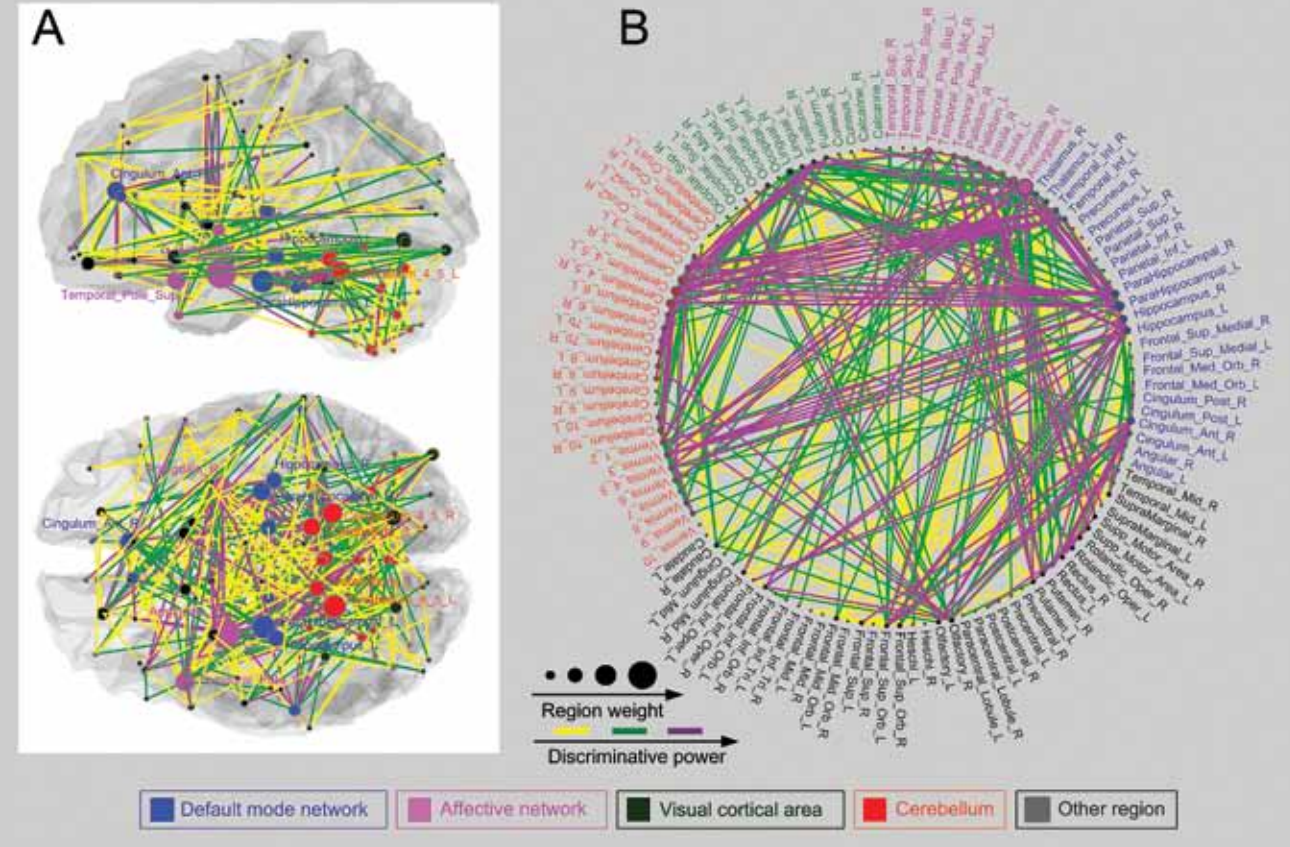
University of Aberdeen researchers used fMRI to demonstrate how electroconvulsive therapy works on the brain in people who are severely depressed. **From left:** Jennifer Perrin, BSc., M.A., Ph.D.; Ian Reid, M.B.Ch.B., Ph.D., M.R.C.Psych.; Susanne Merz, Ph.D. (*back row*) Daniel Bennett, M.B.Ch.B., M.R.C.Psych.; and Christian Schwarzbauer, Ph.D.

ECT remains “a very controversial treatment,” Dr. Reid said. While the conventional medical view is that ECT is useful and safe, there are those who consider it “outmoded and barbaric,” he said. “The criticism against it has been, ‘How can it possibly make sense—how does giving someone electric shocks and making them have a fit help depression?’” he said. “Because our study answers that question to a point, it may help ECT to become more acceptable to those thinking about the treatment. How it works is no longer a complete mystery.”

In addition, the effect of ECT parallels a variety of anti-depressive treatments. “If we can replace ECT with a less invasive treatment that produces similar neurophysiological changes with fewer side effects, we would be doing depressed patients a real service,” Dr. Reid said. “Because we now have a handle on what effects need to happen, evaluating known treatments for depression could become much easier.”

“We now have a handle on what effects need to happen ... evaluating treatments for depression could become easier.”

Ian Reid, M.B.Ch.B., Ph.D., M.R.C.Psych.



Whole-brain resting-state fMRI may provide potential effective biomarkers for the clinical diagnosis of major depression, new research shows. Above: Region weights and the distribution of 442 consensus functional connections (regions are colour-coded by category). The line colours representing the relative consensus functional connections are scaled with their mean discriminative power in the leave-one-out cross-validation. (A) Consensus functional connections demonstrated in left and top view. (B) Region weights and consensus functional connections demonstrated in a circle graph.

Ling-Li Zeng et al. "Identifying Major Depression Using Whole-brain Functional Connectivity: a Multivariate Pattern Analysis," *Brain* (2012) 135(5): 1498-1507, Fig. 2. By permission of Oxford University Press on behalf of The Guarantors of *Brain*

fMRI May Provide Biomarker for Diagnosing Depression

Investigators from several universities in the People's Republic of China used resting-state fMRI to help identify patients suffering from major depression. Their research was published online in the March 14 edition of the journal *Brain*.

A research team led by Dewen Hu, Ph.D., a professor in the College of Mechatronics and Automation at the National University of Defense Technology in Changsha, Hunan, used multivariate pattern analysis to classify 24 depressed patients from 29 demographically similar volunteers. Researchers identified depressed individuals from healthy controls with 94.3 percent accuracy.

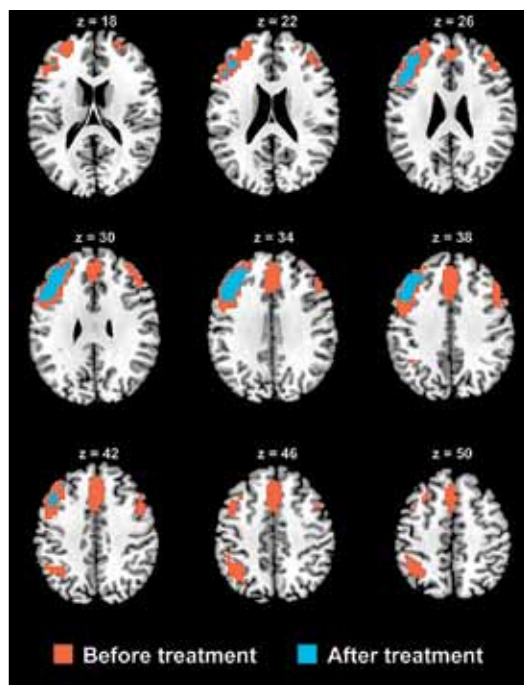


Hu

"Our findings suggest that the disease-related resting-state network alterations, including abnormalities in the default mode network, affective network, visual cortical areas and cerebellum, may give rise to a portion of the complex of emotional and cognitive disturbances in major depression," Dr. Hu said.

The study also suggests that the brain's amygdala, anterior cingulate cortex, parahippocampal gyrus and hippocampus could play important roles in the pathophysiology of major depression, Dr. Hu said.

"Whole-brain resting-state fMRI may provide potential effective biomarkers for the clinical diagnosis of major depression," Dr. Hu said. □



Functional connectivity in severely depressed patients before (displayed in orange) and after ECT treatment (displayed in cyan), showing a substantial reduction in the brain's functional connectivity after treatment.

WEB EXTRAS

☞ To access the study, "Electroconvulsive Therapy Reduces Frontal Cortical Connectivity in Severe Depressive Disorder" by Ian Reid, M.B.Ch.B., Ph.D., M.R.C.Psych., and colleagues in the April 2012 edition of the *Proceedings of the National Academy of Sciences*, go to www.pnas.org/content.

☞ To access an abstract of the study, "Identifying Major Depression Using Whole-brain Functional Connectivity: A Multivariate Pattern Analysis" by Dewen Hu, Ph.D., and colleagues in the March 14 edition of the journal *Brain*, go to brain.oxfordjournals.org/content.

Economic Boom Aids Brazilian Radiology

After a decade of remarkable economic progress—including a gross domestic product (GDP) growth rate of 7.5 percent in 2010 alone—Brazil surpassed the United Kingdom as the world's sixth largest economy in 2012, making it the clear leader in the burgeoning Latin American market.

AND WHILE Brazil still faces challenges in overcoming economic disparities within its population, the country has made remarkable strides in expanding its healthcare coverage to its nearly 200 million people in the past two decades since implementing a national healthcare program. Radiology, according to presenters of the RSNA 2012 session Brazil Presents, is an integral part of that growth in terms of state-of-the-art technology, research, quality of care and continued demand for radiologists and sonographers.

"Radiological research in Brazil has been growing fast in recent years, together with the economy," said Pedro Daltro, M.D., coordinator of the Brazil Presents session. "We have large medical centers in major Brazilian cities where radiology is very close to the level of first world countries."

"Brazil's national health system has been an outstanding success," said 2012 RSNA President George S. Bisset III, M.D. "The 'health for all' approach has fostered stellar growth in the imaging industry with enhanced access to cutting-edge technology and techniques. On a recent visit to Rio de Janeiro and Sao Paulo, I had the opportunity to witness first-class radiology practiced by world-class radiologists. I am really looking forward to hearing more about these developments at the RSNA annual meeting."

Brazil Presents will feature noted Brazilian radiologists presenting scientific papers on the latest topics in MR imaging, including practical factors that influence the quality of MR imaging, the role of MR in demyelinating diseases and pediatric neuroimaging and the use of 3D MR to evaluate fetal abnormalities.

Public-Private Partnerships Aid Radiology

South America's largest country in terms of area and population, Brazil faces considerable challenges in providing quality healthcare to those living in remote rural regions.

"Our country is of continental size, which easily explains the huge inequalities between regions," said Manoel Aparecido Gomes da Silva, M.D., president of the Colégio Brasileiro de Radiologia e Diagnóstico por Imagem, CBR (Brazilian College of Radiology and Diagnostic Imaging), who will give the opening address and present a scientific session at Brazil Presents. "The rural areas have almost no medical care."



Daltro



Gomes da Silva

To that end, government initiatives are under way to improve healthcare coverage including increased physician training, establishing health centers in the country's 5,000-plus municipalities and public-private partnerships with equipment suppliers.

"During the '80s, access to state-of-art-technology at top universities was very limited, and even though the investments are occurring now, it will take more time to access the most recent technologies," Dr. Daltro said.

Compared to other developed countries, Brazil invests considerably less public monies in healthcare. Bridging the gap is the private sector, which accounts for nearly half of the country's healthcare expenditures, Dr. Gomes da Silva said. "The private sector has been largely responsible for the majority of investments in healthcare in Brazil, especially in the area of diagnostic imaging," he said.

“We have large medical centers in major Brazilian cities where radiology is very close to the level of first-world countries.”

Pedro Daltro, M.D.



Radiology, according to presenters of the RSNA 2012 session Brazil Presents, is an integral part the growth of Brazil in terms of state-of-the-art technology, research, quality of care and continued demand for radiologists and sonographers. Above: the Octavio Frias de Oliveira Bridge in São Paulo.

Such public-private partnerships are aiding the expansion of radiology on a number of fronts, Dr. Daltro added.

“Private radiology practice in Brazil is very developed and offers state-of-the-art technologies,” he said. “Public-private partnerships not only meet the need for high quality radiological services in public institutions but also provide private physicians with access to scientific advances.”

Brazil Needs Radiologists, Sonographers

Despite historic low unemployment rates in the country, Dr. Gomes da Silva said radiologists and sonographers are in demand in Brazil. He noted that the CBR—established in 1948 and currently more than 7,500 members strong—now offers 159 training centers for radiology residents and has increased access to modern equipment.

“The radiology profession in Brazil is still strong despite of all the changes caused by national health insurance and the large scale of corporate invasion of the diagnostic imaging market,” he said.

In terms of research, Brazil’s output has grown quickly in recent years, Dr. Daltro said. “The government is investing more not only in infrastructure for research, but also in people by offering scholarships in Brazil and abroad,” he said.

The depth and breadth of that research is evident from the scope of programming offered at Brazil Presents.

Presenter Emerson Gasparetto, M.D., Ph.D., a neuroradiologist and associated professor of radiology at the University Federal of Rio de Janeiro, whose research focuses on infectious and demyelinating diseases, has published more than 130 papers in international journals.

Presenter Antonio Eiras, M.D., who has authored a book on MR imaging of the liver, will describe MR tools that help narrow the differential diagnosis of hypervascular liver lesions. Dr. Daltro will discuss the use of 3D MR to perform virtual bronchoscopy and study of the amniotic cavity.

The future of research in Brazil is promising, Dr. Gomes da Silva said.

Radiology centers at Brazil’s largest medical institutions are conducting cutting-edge research, offering postgraduate courses and training a new class of radiologists whose skills will benefit the country at large, he said.

“Our current challenge is to disseminate to more distant regions a better quality of radiology, similar to that practiced in large cities,” he added. □

BRAZIL FACTS

POPULATION¹
206 million

CAPITAL
Brasilia
(3.9 million)

LARGEST CITY
São Paulo
(20 million)

RSNA MEMBERS²
1,910

RSNA ANNUAL MEETING ATTENDANCE³
2,751

RSNA HONOREES FROM BRAZIL

HONORARY MEMBER, 2000

Sidney de Souza Almeida, M.D.
(Americana)

HONORARY MEMBER, 2012

Giovanni G. Cerri, M.D., Ph.D.
(São Paulo)

¹All populations are estimates based on latest information available. ²RSNA Membership number as of August 2012. ³RSNA Annual Meeting Attendance number 2007–2011 total.

BRAZIL PRESENTS: TOPICS IN MRI

Monday, Nov. 26, 10:30 a.m. – 12 p.m.

- **Opening Remarks**, George S. Bisset III, M.D., 2012 RSNA President, and Manoel Aparecido Gomes da Silva, M.D., President of the Colégio Brasileiro de Radiologia e Diagnóstico por Imagem, CBR (Brazilian College of Radiology and Diagnostic Imaging)
- **Introduction to Brazilian Radiology**, Pedro Daltro, M.D.
- **Parameters and Trade-offs in MRI (1.5 and 3.0 T)**, Douglas Racy, M.D.
- **Congenital Posterior Fossa Malformations — New Concepts**, Leonardo Vedolin, M.D.
- **The Role of Advanced MRI Techniques in Demyelinating Diseases**, Emerson Gasparetto, M.D.
- **MRI of Hypervascular Lesions in the Cirrhotic Liver: A Diagnostic Dilemma**, Antonio Eiras, M.D.
- **Advances in Fetal 3D MRI**, Pedro Daltro, M.D.

Automated Breast Ultrasound Has Potential for Widespread Use

Calling it a “game-changer,” researchers who demonstrated that 3D-automated breast ultrasound (ABUS) offers a more efficient screening alternative than handheld screening ultrasound are optimistic about its potential for widespread clinical use.

ADDITIONALLY, a U.S. Food and Drug Administration (FDA) expert panel recently recommended that U-Systems' *somo•v*® Automated Breast Ultrasound system be approved for breast cancer screening in women with dense breasts, moving the modality closer to final FDA approval.

3D-ABUS has the potential to reduce physician interpretation time to about three minutes—dramatically less than the 20.8 minutes estimated for handheld ultrasound screening, according to lead author Rachel Brem, M.D., director of the Breast Imaging and Interventional Center at George Washington University, who presented findings at the recent American Roentgen Ray Society annual meeting. ABUS also enables clearer detection of breast cancer in women with dense breasts and can be quickly and easily integrated into a screening environment, Dr. Brem said.

“Having a technique like ABUS that takes just three minutes is a ‘game-changer’ in appropriately screening women with dense breasts,” Dr. Brem said. “It’s not only a huge time-saver, but it’s sufficiently short so that it could even be integrated into a screening environment.”

As part of a multi-institutional prospective trial, Dr. Brem and colleagues reviewed 75 sequential ABUS examinations that were interpreted by one of three radiologists, each with a minimum of two years' experience with ABUS interpretation. Because non-physician personnel routinely perform the imaging exam, the physician time recorded in the ABUS study was for interpretation only.

Results showed the mean reading time for the three radiologists was 173.4 seconds or 2.9 minutes, with a standard deviation of 90.4 seconds. “These results suggest that ABUS is a time-efficient tool that can be effectively integrated into the workflow of a busy clinical practice,” Dr. Brem said.

Experience Could Impact ABUS Reading Time

Some breast imaging experts say, however, it could be too soon to estimate precisely how fast ABUS is compared to handheld ultrasound.

“Interpretation time is the biggest question we’re facing right now and there are a lot of differences between the two modalities,” said Ellen B. Mendelson, M.D., section chief of Breast and Women’s Imaging at Northwestern University’s Feinberg School of Medicine in Chicago. “In terms of time, as with any other new technology, the more you do



Brem



Lander

it the faster you become and the more confident you become in recognizing what is significant and what isn’t.”

Nevertheless, Dr. Mendelson has long been a proponent of ABUS. “For roughly 20-25 years we have thought there was some merit in using additional modalities to supplement mammography—first for diagnostic purposes to increase the specificity of mammography, then as a supplement to screening,” she said.

As the protocol investigator for a breast imaging study by the American College of Radiology Imaging Network (ACRIN), Dr. Mendelson and colleagues determined that additional cancers not found with mammography were discernible with handheld physician-performed ultrasound in women with dense breasts.

“The numbers we found were sufficient to justify support for additional screening in those women who have dense glandular tissues,” she said.

“Having a technique like ABUS that takes just three minutes is a ‘game-changer’ in appropriately screening women with dense breasts.”

Rachel Brem, M.D.

Dr. Brem said breast cancers are not detected by mammography in one-third of women with dense breasts, wherein cancer appears as a white mass against white breast tissue (in women with fatty breasts, 95 percent of cancers are detected). With ultrasound, most cancers are black or dark gray against the white background, making them easier to detect—which is especially important for women with dense breasts, Dr. Brem said.

“We know that we find substantially more cancers using ultrasound,” she said. “For women who don’t have dense breasts, mammography is sufficient. For very high-risk women, like women with the BRCA gene, we perform either MR imaging or Breast Specific Gamma Imaging, both of which use physiologic parameters as well as anatomy. But there is a large population of intermediate-risk women—women with dense breasts—who don’t qualify for MR imaging screening so we clearly need another adjunct to screening.”

The 3D view is one major advantage offered by ABUS, said Marla Lander, M.D., a breast imager with Desert Comprehensive Cancer Center, Palm Springs, Calif. Viewing the breast in two-millimeter thick coronal slices gives the breast imager a highly detailed view that speeds the detection process, she said.

“When you view the ultrasound in the coronal plane, all you’re looking for is gray or black holes or circles, or areas of architectural distortion, or sometimes a combination,” Dr. Lander said. “You’re only focusing on two different things as you’re whizzing through slice after slice after slice. The coronals make detection very easy to perceive.”

Breast MR Imaging Detects Additional Cancers

Although screening breast ultrasound has been shown to detect cancers not seen at mammography, results of the ACRIN 6666 trial reported in the April 2012 edition of the *Journal of the American Medical Association* confirmed that a single screening MR examination following three years of annual mammography and screening ultrasounds identified additional cancers. The trial focused on women at elevated risk for breast cancer.

The supplemental cancer yield of the single breast MR screening was 14.7 per 1,000 compared with 5.3 per 1,000 screens for the first year of screening ultrasound. Researchers did note that breast MR



Automated breast ultrasound takes an average of three minutes of physician time, potentially offering a more efficient screening alternative for women with dense breast tissue, a new study shows. A U.S. Food and Drug Administration (FDA) expert panel recently recommended that U-Systems’ *somo•v*® Automated Breast Ultrasound system (above) be approved for breast cancer screening in women with dense breasts, moving the modality closer to final FDA approval.

imaging was more expensive than screening ultrasound and not as well tolerated by patients.

The addition of screening breast ultrasound or breast MR imaging resulted in a higher cancer yield but also generated more false positives. According to results of the ACRIN 6666 study, 5 percent of women required biopsy but only 7.4 percent of those women actually found to have cancer.

ABUS Could Ride the Wave of FDA Approval

ABUS is FDA-approved for diagnostic use in the U.S. as an adjunct to mammography, but the technology is not yet specifically cleared for screening use in women with dense breasts. U-Systems, which received premarket FDA approval in April for using its *somo•v*® Automated Breast Ultrasound for screening, was expected to receive final FDA approval later in 2012, said Drs. Lander and Brem.

If approval is granted, Dr. Lander said she expects ABUS to be quickly adopted into widespread clinical practice.

“I feel like the wave is building and it’s definitely coming,” Dr. Lander said. “But we’re just at the base of the wave at this point.” □

WEB EXTRAS

For more information on the research of Rachel Brem, M.D., at George Washington University, go to the Brem Foundation website at www.bremfoundation.com.

To view a video of Dr. Brem discussing the latest in breast cancer detection technology on the Dr. Oz show and to access a PowerPoint of Dr. Brem’s research on 3D-automated breast ultrasound (ABUS), go to rsnanews.RSNA.org.

To access the ACRIN 6666 study, “Detection of Breast Cancer with Addition of Annual Screening Ultrasound or a Single Screening MRI to Mammography in Women with Elevated Breast Cancer Risk,” in the April 2012 issue of the *Journal of the American Medical Association*, go to jama.jamanetwork.com/article.aspx?articleid=1148330.

MOC Changes Increase Transparency, Streamline Certification

Continued from Page 6

Despite the accompanying challenges, Dr. Becker stressed that ABR is prepared to assist diplomates in every step of the new process and that the changes will provide very real benefits to all involved (See sidebar, Page 6).

As consumers continue to push for accountability, the public reporting process will only become more robust, Dr. Becker said. In fact, radiologists should prepare for more changes in the future, he

said. For example, CMS has plans for its Physician Compare website ultimately to report not only demographic and certification data, but physician-specific performance data. “Viewed with this perspective on the future in mind, MOC status reporting (“meeting/not meeting the requirements of MOC”) on the ABMS website represents the lowest rung on the new ladder of transparency and accountability,” Dr. Becker said. □

Radiologists Cautiously Optimistic About Next Meaningful Use Phase

Radiology informatics experts are calling recent proposed changes to the second phase of federal “meaningful use” incentives a step in the right direction but say further revisions are needed to ensure that the incentives truly apply to the practice of radiology.

THE CENTERS for Medicare & Medicaid Services (CMS), which unveiled meaningful use as part of the 2009 American Reinvestment and Recovery Act, set aside more than \$20 billion in health information technology (HIT) incentives to providers who meaningfully use electronic health records (EHRs). CMS considers health care providers meaningful users when they employ certified EHR technology to improve the quality, safety and efficiency of health care delivery. Eligible providers, including more than 90 percent of all radiologists, can qualify for up to \$44,000 each in federal incentive payments per year.

Finalized about two years ago, Phase 1 was essentially intended to put providers on the path toward moving key clinical data into an electronic format. Radiology groups criticized Phase 1 for being too focused on primary care physicians.

“I understand the initial focus of the meaningful use program on the broad group of practitioners who see patients in a clinic—that is the most prevalent mode of physician practice, so it is the low hanging fruit,” said Curtis Langlotz, M.D., Ph.D., vice-chair for informatics in the Department of Radiology at the University of Pennsylvania Health System in Philadelphia and a member of RSNA’s Radiology Informatics Committee (RIC). “But how information technology drives the quality of care is quite different among clinical specialties. To be effective, these incentive programs ultimately must recognize the differences.”

The American College of Radiology (ACR) urged the Office of National Coordinators for (ONC) Health Information Technology (HIT) Policy Subcommittee to revisit the meaningful use vision for radiology, leading to a number of proposed changes for Phase 2 of the program, in which providers must essentially demonstrate their compliance with electronic data exchange requirements.

The proposed rule—released in February 2012 and set to take effect in 2014—offers a number of potential concessions for hospital-centric eligible professionals, including:

- Compliance exemptions for many hospital-based providers who are not involved in their facility’s information technology decisions
- A discretionary menu set objective targeted toward diagnostic image accessibility in EHRs
- Recommendations for radiology-relevant clinical quality measures



Langlotz



Dreyer

- More flexible definitions of what constitutes justified EHR
- A consolidation of the eligible hospital and eligible professional technology certification criteria

“There have been numerous and productive interactions between the involved regulatory agencies and the ACR Government Relations group over the past year,” said Keith Dreyer, D.O., Ph.D., vice-chair of the Department of Radiology at Massachusetts General Hospital, Boston, chair of the ACR IT and Informatics Committee-Government Relations Subcommittee and a member of RSNA’s RIC. Dr. Dreyer will deliver a New Horizons Lecture on meaningful use at RSNA 2012 (see sidebar). “Many of our requested additions and modifications to the regulations during those meetings specific to medical imaging and radiologists can be seen in Phase 2 proposed rules.”

“Many radiologists will end up qualifying for meaningful use incentives by piggy backing onto existing EHRs or by augmenting their imaging center workflow to satisfy the measures.”

Curtis Langlotz, M.D., Ph.D.

Nevertheless, the changes planned for Phase 2 still fall short of fully incentivizing meaningful use for radiology, according to Dr. Langlotz.

“Meaningful use measures that might be good proxies for the quality of care delivered by a doctor in a clinic, such as obtaining a smoking history, maintaining a medication list and e-prescribing, don’t have much effect on the quality of care delivered by most radiologists,” Dr. Langlotz noted.

“Many radiologists will end up qualifying for meaningful use incentives by piggy backing onto existing EHRs or by augmenting their imaging center workflow to satisfy the measures,” Dr. Langlotz said. “The actual quality benefits of those IT investments are low compared to what could be achieved if meaningful use measures were specifically tailored toward radiologists.”

Radiology-specific Changes Still Needed

The 60-day comment period on Phase 2 ended in May and the final rule is anticipated later this fall. Before then, additional changes are not only anticipated but necessary, radiologists say.

In a 2011 survey of 216 radiologists conducted by the RSNA and KLAS, an Orem, Utah-based research firm specializing in monitoring and reporting on the performance of healthcare vendors, nearly 40 percent of participants cited concerns about either the lack of clarity in meaningful use guidelines or decreased efficiency as a result of adopting those guidelines.

Those surveyed pointed to several radiology-specific changes that would improve future versions of the rule, including allowing access to appropriate patient information at the time of image interpretation, electronic exchange of orders and reports, communication of critical findings and automated follow-up reminders.

The RSNA-KLAS survey also revealed that many radiologists are unprepared for the changes ahead. While 60 percent of surveyed radiologists either plan to or are considering qualifying for meaningful use, only 6 percent considered themselves to be educated on the subject.

“The radiology IT industry was slow to certify their products for the meaningful use program,” Dr. Dreyer said. “As such, many radiology practices eligible for meaningful use have been without IT solutions necessary for them to comply. This has changed over the past year and now many radiology information system and radiology ambulatory EHR solutions have achieved complete certification for meaningful use.

“Furthermore, there was—and, to some extent, still is—a lack of awareness by radiology groups and chief information officers that nearly all radiologists (including most all hospital-based radiologists) are considered eligible professionals and thus are eligible for the meaningful use program’s incentives and penalties,” Dr. Dreyer said.

Radiology Poised to Integrate Informatics Changes

The final stage, Phase 3—focusing on optimization—will follow in 2015. Providers who do not meet criteria by 2015 could be hit with penalties, though informatics experts believe radiology is advantageously positioned compared with other medical specialties.

“Radiology has been at the forefront of technology adoption for many years,” Dr. Langlotz said. “Many radiology practices have been filmless and paperless and even transcription-less for many years. Only a fraction of non-radiology practices can make that claim, although the number is increasing. Meaningful use has helped accelerate that change, which is a good thing.”

The combination of incentives and penalties has helped to promote adoption, both in the hospital and ambulatory programs, Dr. Dreyer added.

“I think this trend will continue and increase as more meaningful use-certified technology becomes available. Further, I don’t see the proposed additions and modifications of Phase 2 to represent much of an additional barrier for eligible professionals and hospitals,” Dr. Dreyer said. “The involved regulatory agencies have been listening to us and modifying the federal program as best they can within the prescribed legislation parameters to accommodate our specialty’s uniqueness. Our continued involvement at this level is essential as there is no question that federal regulatory oversight of medical informatics and patient information will be a constant in our future and that meaningful use is just the beginning. □

WEB EXTRAS

RSNA Aids in Achieving Meaningful Use Goals

Meaningful use is a health information technology (HIT) initiative implemented by the federal government to encourage the standardization of electronic health records (EHR) by physicians. For more information on meaningful use and how RSNA can help you achieve the program’s goals, go to rsna.org/Meaningful_Use.aspx.

☑ To access meaningful use resources from the Office of the National Coordinator for Health Information Technology, go to healthit.hhs.gov/meaningfuluse/resources

LECTURE TO LOOK AT FUTURE OF RADIOLOGY IT, INCLUDING GOVERNMENT’S ROLE

Keith J. Dreyer, D.O., Ph.D., will deliver the Eugene P. Pendergrass New Horizons Lecture, “The Future of Imaging Informatics—Meaningful Use and Beyond,” at RSNA 2012. Dr. Dreyer contends that recent enactment of programs such as Meaningful Use, along with the rapid evolution of the Internet and creation of high resolution mobile computing devices, are not only changing the practice of radiology but also fueling a revolution of new opportunities and challenges. Notable too, he says, are computational algorithms that provide new pathways for innovation, including nationally standardized clinical decision support, natural language processing and cloud computing. Dr. Dreyer’s lecture will explore the current and near future use of innovative information technologies, the impact they will have on radiology practice and the federal policies and regulations under way that promote and oversee their use.



RESEARCH & EDUCATION FOUNDATION DONORS



The R&E Foundation thanks the following donors for gifts made May 12, 2012 – June 15, 2012.

Vanguard Program

Companies supporting endowments and term funding for named grants

HITACHI Inspire the Next

Hitachi Medical Systems
\$15,000
A Vanguard company since 2000

SIEMENS

Siemens Healthcare
\$120,000
A founding Vanguard company since 1990

VARIAN medical systems

Varian Medical Systems
\$30,000
A Vanguard company since 2002

A partner for **life**

Visionaries in Practice Program

A giving program for private practices and academic departments

BRONZE CIRCLE (\$10,000)



Advanced Diagnostic Imaging P.C.
Nashville, Tenn.



Atlantic Medical Imaging
Galloway, N.J.



Charlotte Radiology
Charlotte, N.C.



Eastern Radiologists,
Greenville, N.C.



Mecklenburg Radiology Associates
Charlotte, N.C.



Radiological Associate of Sacramento Medical Group, Inc.
Sacramento, Calif.



Radiology Imaging Associates, P.C.
Englewood, Colo.



Raleigh Radiology
Raleigh, N.C.

Exhibitors Circle Program

Companies who give annual unrestricted gifts at four levels from \$1,500 to \$10,000

GOLD CIRCLE (\$5,000)



Amirsys



Intelrad Medical Systems



Medicalis



ProScan Imaging

BRONZE CIRCLE (\$1,500)



Oxford Instruments



Wolters Kluwer Health / Lippincott Williams & Wilkins

Visionary Donor Program

Individuals recognized for cumulative lifetime donations

GOLD VISIONARY (\$15,000)

Miriam T. & David H. Hussey, M.D.
Judith S. & Peter M. Som, M.D.

SILVER VISIONARY (\$10,000)

Rosemary J. Chambers, M.D.
Nalini & Vikram S. Dogra, M.D.

BRONZE VISIONARY (\$5,000)

Vivek C. Yagnik, M.D.

Individual Donors

Donors who give \$1,500 or more per year qualify for the RSNA Presidents Circle. Their names are shown in bold face.

\$5,000

Barbara Carter, M.D.
In memory of Jeffery P. Moore, M.D.
Wake Radiology Consultants, P.A.,
Raleigh, N.C.

\$2,500 - \$4,999

Tiffany & Phan T. Huynh, M.D.

\$1,500 - \$2,499

Anonymous
Patricia G. Becker, M.D. & Gary J. Becker, M.D.
Sallie & Michael H. Bleshman, M.D.
Constance Whitehead & M. Paul Capp, M.D.
In memory of Jerome F. Wiot, M.D.
Rosemary J. Chambers, M.D.
Carmen M. Bonmati, M.D. & Benjamin N. Conner, M.D.

Nalini & Vikram S. Dogra, M.D.
Maria Jose Grand & Ricardo D. Garcia-Monaco, M.D., Ph.D.
Miriam T. & David H. Hussey, M.D.
Vasantha & Mahadevappa Mahesh, M.S., Ph.D.
Claudia P. & Levon N. Nazarian, M.D.
Nargis S. Patel, M.D. & Suresh K. Patel, M.D.
Judith S. & Peter M. Som, M.D.
Sandralee & William M. Thompson, M.D.
Jean M. & James H. Thrall, M.D.
Patricia & Eric M. Wilner, M.D.
Vivek C. Yagnik, M.D.
\$500 - \$1,499
Marian U. & Melvin E. Clouse, M.D.
Hannah & Lawrence R. Goodman, M.D.

Charles H. Kuntz, M.D.
AnnaMae & Joseph L. Lenkey, M.D.
Louise A. & Perry G. Pernicano, M.D.
Gary W. Swenson, M.D.
Carlos A. Tarzian, M.D.
Ingrid E. & Stephen R. Thomas, Ph.D.
\$251 - \$499
Judith S. & Ronald C. Ablow, M.D.
Jaime Bonilla, M.D.
Horacio R. D'Agostino, M.D., F.I.C.S.
Donna & John P. Karis, M.D.
Beth D. Kruse, M.D. & Thomas Moore Jaylynn K. & Michael J. Milstein, M.D.
Robert G. Mitchell, M.D.
Mark S. Ridlen, M.D.
Lori V. Smithson, M.D.
Nina A. Mayr, M.D. & William T. Yuh, M.D., M.S.E.E.

YOUR DONATIONS IN ACTION

With an RSNA Research & Education (R&E) Foundation Research Seed Grant, **Muneeb Ahmed, M.D.**, is studying the tissue effects of focal, heat-based tumor ablation treatments that use image-guided placement of thin electrodes to kill focal tumors. Dr. Ahmed will study the effect of radiofrequency tumor ablation on stimulating growth in tumor and normal cells not near the treatment zone.

“Tumor ablation therapies are now very commonly used to treat focal tumors in a range of organs and diseases, and in some cases, have become the preferred treatment of choice” Dr. Ahmed said. “We already know that tumor ablation has an effect on tissues and cellular processes immediately surrounding the treatment zone. Understanding how ablation interacts with tissue and tumor biology farther away from the treatment area will be critical to addressing current limitations in treatment, and identifying new ways in which image-guided ablation therapies may be used in the future.”



\$250 or less

Anonymous (4)
Muge Aygen, M.D. & Levent Aygen
Maria C. & Ricardo E. Baakini, M.D.
Tommie & Morton A. Bosniak, M.D.
Simon D. Braun, M.D.
Robyn & Patrick L. Brien, M.D.
Holly & James A. Brink, M.D.
Brian D. Briscoe, M.D.
Marcia Haddox &
Kenneth A. Buckwalter, M.D.
Urbanita G. & Winston Casis, M.D.
T. Linda Chi, M.D.
Linda N. & Richard L. Clark, M.D.
Rebecca S. Cornelius, M.D. &
James J. Arbaugh, M.D.
Jun Deng, Ph.D.
Carl J. D'Orsi, M.D.
Heratch O. Doumanian, M.D.
Mahwash M. Durrani, M.D. &
Asad Khan Luni
**Tova R. &
James P. Eisenberg, M.D., Ph.D.**
Dan Fertel, M.D.
**Ayca Gazelle, M.D. &
G. Scott Gazelle, M.D., M.P.H., Ph.D.**
Suzanne & Richard A. Geise, Ph.D.
Vera & Peter G. Gleason, M.D.
Verena S. & Basil J. Grieco, M.D.
Mary R. & Donald P. Harrington, M.D.
Barbara & Wayne D. Harrison, M.D.
Jay P. Heiken, M.D.
Beverly L. Hershey, M.D.

Caroline L. Hollingsworth, M.D. &
John Hollingsworth, M.D.
Kaye & Stephen P. Humphrey, M.D.
Barbara P. Huss, M.D. &
Richard G. Huss, M.D.
Marc F. Inciardi, M.D.
Mary Ellen Jafari, M.S.
Randy L. James, M.D.
Ada Brainsky &
Diego Jaramillo, M.D., M.P.H.
Sandra & Frederick A. Jones, M.D.
Annie Kalapparambath, M.D.
Tomy P. Kalapparambath, M.D.
Bernadette & Jeremy J. Kaye, M.D.
Maged F. Khalil, M.D.
Faroque & Arfa Khan, M.D.
Richard A. Kiszonas, D.O.
Judy K. Tam, M.D. &
Jeffrey S. Klein, M.D.
In memory of Gordon Gamsu, M.D.
Lisa & Marc D. Kohli, M.D.
Olga & Krzysztof Kozielek, M.D.
Carolyn & Raymond A. La Rue III, M.D.
Kent T. Lancaster, M.D.
Neil Lester, M.D.
Hing-Har Lo, M.D. & Y. A. Liu
John D. MacKenzie, M.D.
Madhumala Madhavan, M.B.B.S., M.D.
Herbert R. Madry Jr., M.D.
Maryetta & Alfred A. Mansour, M.D.
Daniel M. Marder, M.D.
Oscar Martinez, M.D.
William W. Mayo-Smith, M.D.

David A. Moeller, M.D.
Mark D. Monson, M.D.
Johnny U. Monu, M.D.
In honor of Andrew A. De Smet, M.D.
Desiree E. Morgan, M.D.
Carrie C. Morrison, M.D.
Wendy & Robert Orth, M.D., Ph.D.
David R. Pede
David R. Pennes, M.D.
Stergios Prapavesis, M.D.
Le-Ping Pu, M.D., Ph.D.
Patricia A. Randall, M.D.
In honor of E. Robert Heitzman, M.D.
Jose C. Rayón-Aledo, M.D., M.Sc.
Eustorgio Ruiz Jr., M.D.
U. Yun Ryo, M.D., Ph.D.
Barry A. Sacks, M.D.
Anne & Ernest M. Scalzetti, M.D.
Leanne L. Seeger, M.D. & Rudi Foorman
Robert J. Seveck, M.D.
Julie H. Song, M.D.
Gail B. Carney & David L. Spizarny, M.D.
Harry L. Stein, M.D.
David R. Stoppenhagen, M.D.
Roberta M. Strigel, M.D., M.S. &
Ben Walker
Margaret A. Stull, M.D. &
Gregory J. Stull
*In memory of Carl J. Vyborny, M.D.,
Ph.D.*
Cathy & Daniel C. Sullivan, M.D.
An Tang, M.D.
Drew A. Torigian, M.D., M.A.

Susan F. Townsend, M.D. &
Ronald R. Townsend, M.D.
Sabita R. &
Madhusudana R. Tummala, M.D.
Ronni C. & Eric J. Udoff, M.D.
Patsy A. Uken, M.D. & Larry D. Nelson

The RSNA R&E Foundation provides the research and development that keeps radiology in the forefront of medicine. Support your future—donate today at RSNA.org/donate.

Maria V. Villalon, M.D.
Haiyi Wang, M.D.
Faith A. Weidner, M.D.
Risa H. Kent, M.D. &
Jeffrey C. Weinreb, M.D.
Paul R. White, M.D.
Jean K. Yi, M.D.
Andrej J. Zajac, M.D.

RSNA AND ASNR FOUNDATIONS COLLABORATE TO FUND NEW RESEARCH

With the goal of funding additional research in neuroradiology and creating a pipeline for new investigators, the RSNA Research & Education Foundation and The Foundation of the American Society of Neuroradiology (ASNR) are collaborating to fund a joint grant award.

As part of the R&E Foundation's hallmark Research Scholar Grant program, the specially named grant will provide career development for those who have completed neuroradiology training and are pursuing a career in neuroradiology research. The grant will provide \$75,000 per year for two years (\$150,000 total). Applications will be accepted beginning in October 2012 and the first specially named ASNR/RSNA Research Scholar Grant will be awarded in 2013.

“The Foundation is delighted to partner with The Foundation of the ASNR in the sponsorship of this award,” said Theresa C. McCloud, M.D., chair of the R&E Foundation Board of Trustees. “This co-sponsorship allows both organizations to leverage their resources to fund new research in neuroradiology and to create dedicated funding for new investigators.”

For more information visit RSNA.org/Research_Scholar_Grant.aspx.

Journal Highlights

The following are highlights from the current issues of RSNA's two peer-reviewed journals.

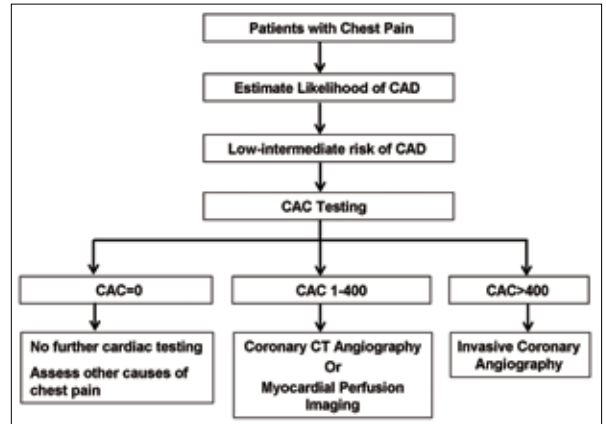
Role of Noncontrast Multidetector CT Coronary Artery Calcium Testing in Asymptomatic and Symptomatic Individuals

While current risk assessment approaches for coronary artery disease (CAD) substantially misclassify intermediate- to long-term risk for the occurrence of CAD in asymptomatic individuals, noncontrast-enhanced, or noncontrast, CT detection of coronary artery calcium (CAC) improves the ability to accurately predict risk in vulnerable groups and adds information above and beyond global risk assessment.

In a Review and Commentary article in the September issue of *Radiology* (RSNA.org/Radiology), Khurram Nasir, M.D., M.P.H., of Yale University in New Haven, Conn., and colleagues examine the methods, value and potential role of noncontrast-enhanced, or noncontrast CT assessment of CAD for risk stratification in asymptomatic and symptomatic individuals.

A zero CAC score stands alone as perhaps the most powerful negative risk factor for development of a coronary event, according to the authors. Assessment of CAC appears to be the most predictive in the intermediate-risk group. "CAC testing has value in triaging low- and intermediate-risk patients with chest pain, a role acknowledged by current guidelines as it is associated with a very low risk of future cardiac events and thus the potential to reduce downstream testing and costs," the authors write.

Radiology



Schematic algorithm for coronary artery calcium (CAC) testing in symptomatic individuals with chest pain.

(*Radiology* 2012;264:3:637-649) ©RSNA, 2012. All rights reserved. Printed with permission.

Posttreatment CT and MR Imaging in Head and Neck Cancer: What the Radiologist Needs to Know

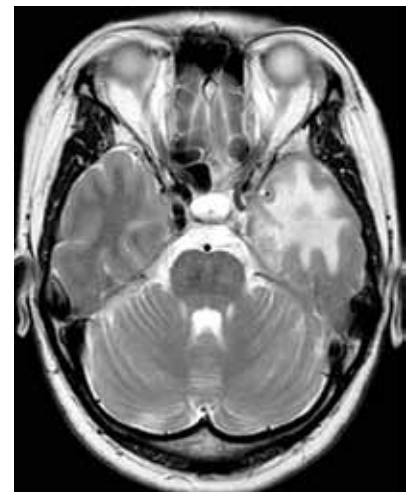
In patients who have been treated for head and neck cancer, a familiarity with the imaging characteristics of posttreatment changes and of the potential complications caused by surgery and irradiation and an ability to differentiate these findings from tumor recurrence are essential for posttreatment surveillance and follow-up management.

In an article in the September-October issue of *RadioGraphics* (RSNA.org/RadioGraphics), Naoko Saito, M.D., Ph.D., of Saitama Medical University, Japan, and colleagues discuss posttreatment imaging of head and neck cancer patients and review the imaging findings associated with surgical and irradiation treatment methods, tumor recurrence and potential treatment complications. Specifically, the authors present key posttreatment imaging appearances for:

- Tumor recurrence
- Postsurgical complications
- Mucosal necrosis
- Osseous and vascular complications
- Radiation-induced lung disease, brain necrosis and neoplasm

Additionally, the authors present a suggested surveillance imaging protocol supported by results in the literature. "Knowledge of the various treatment methods and their expected and unexpected posttreatment imaging findings helps to make an accurate diagnosis and avoid unnecessary further diagnostic work-up," the authors conclude.

RadioGraphics



Radiation-induced brain necrosis in a 54-year-old woman after radiation therapy for a chondrosarcoma of the left cavernous sinus and skull base. Two years after carbon ion radiation therapy, she complained of nausea and memory loss. Axial T2-weighted MR image shows the mass with surrounding edema in the left temporal lobe.

(*RadioGraphics* 2012;32;In Press) ©RSNA, 2012. All rights reserved. Printed with permission.

This article meets the criteria for *AMA PRA Category 1 Credit*[™]. CME is available in print and online.

TRAINEE EDITORIAL FELLOWSHIP RENAMED FOR OLMSTED

The RSNA Board of Directors has renamed RSNA's editorial fellowship for trainees in honor of **William W. Olmsted, M.D.**, who retired in 2011 after 22 years as editor of *RadioGraphics*.

Beginning in 2013 the fellowship will be known as the RSNA William W. Olmsted Editorial Fellowship for Trainees. The one-week fellowship allows the individual to work with both the *Radiology* and *RadioGraphics* editors and visit the RSNA Publications Department at RSNA Headquarters.

Dr. Olmsted oversaw tremendous growth in RSNA's education journal, not only increasing the number of articles published each year but also implementing journal-based CME, beginning the annual monograph issue and managing development of online publication of the journal.

"Dr. Olmsted elevated the educational value of *RadioGraphics*," said William T. Thorwarth Jr., M.D., RSNA Board Liaison for Publications and Communications. "This honor helps recognize his years of service to RSNA and its journal and his contributions to radiology education and practice."

RSNA President-elect Sarah S. Donaldson, M.D., noted: "If his legacy were the 145 issues of *RadioGraphics* that were published under his editorship, that would be great indeed. But an even greater legacy are the thousands of radiologists and other healthcare professionals throughout the world whom he has educated through *RadioGraphics*."

"I take tremendous pride in this fellowship being named for me," Dr. Olmsted said. "Resident mentoring and education have always been extremely important to me. Residents and fellows are the future of the specialty, so good mentoring and education are critical."



Olmsted

Radiology in Public Focus

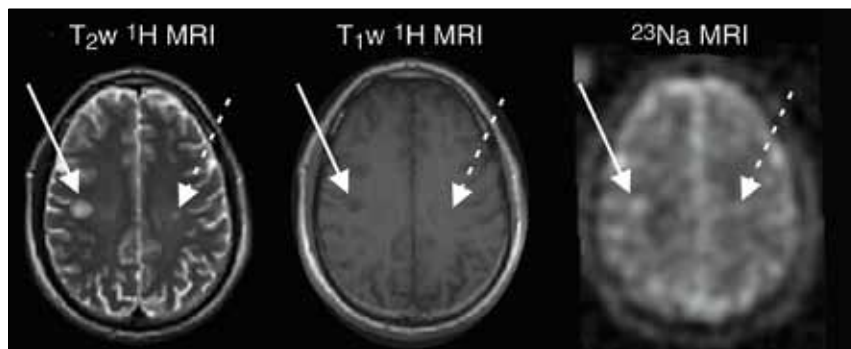
Press releases were sent to the medical news media for the following article appearing in a recent issue of *Radiology*.

Distribution of Brain Sodium Accumulation Correlates with Disability in Multiple Sclerosis: A Cross-sectional ^{23}Na MR Imaging Study

RESEARCHERS using sodium 23 (^{23}Na) MR imaging have quantified brain sodium accumulations and characterized the spatial location of sodium abnormalities at different stages of relapsing-remitting multiple sclerosis (RRMS), a new study shows.

In the study, Wafaa Zaaraoui, Ph.D., of Aix-Marseille University, France, and colleagues obtained 3D ^{23}Na MR imaging data in two groups of patients with RRMS—14 with early RRMS (less than five years in duration), 12 with advanced RRMS (longer than five years in duration) and 15 control subjects. Researchers performed a quantitative assessment of total sodium concentration (TSC) level within compartments (MS lesions, white matter and grey matter) and conducted statistical mapping analysis of TSC abnormalities.

Abnormally high sodium concentrations are already present at the early stage of RRMS in a limited number of brain regions (brainstem, bilateral cerebellum, left temporal pole) and are widespread, affecting the whole brain parenchyma at



Images of a 33-year-old man with early relapsing-remitting multiple sclerosis (RRMS). Examples of substantial sodium accumulation in two macroscopic T2 lesions with two different signal intensity patterns at T1-weighted imaging: one lesion was hypointense (solid arrows) and one was isointense (dashed arrows) to normal-appearing WM on T1-weighted image.

(*Radiology* 2012;264:3:859-867) ©RSNA, 2012. All rights reserved. Printed with permission.

the advanced stage of the disease, according to results. Researchers also demonstrated that the presence of sodium accumulations outside the macroscopic lesions, in normal-appearing brain tissue, helps differentiate patients at the advanced stage of MS from those at the early stage.

"Brain sodium MR imaging can help us better understand the disease and to monitor the occurrence of neuronal injury in MS patients and possibly in patients with other brain disorders," the authors write.

Continued on Next Page

Education and Funding Opportunities



Writing a Competitive Grant Proposal

February 22-23, 2013
RSNA Headquarters,
Oak Brook, Ill.
Registration Deadline
December 17, 2012

REGISTRATION is open for the Writing a Competitive Grant Proposal workshop designed for researchers in radiology, radiation oncology, nuclear medicine and related sciences who are interested in actively pursuing federal funding.

A limited number of slots are available for this 1½-day intermediate-level program that combines didactic and small group interactive sessions designed to help radiologic researchers understand and apply the key components of writing a competitive grant proposal. Topics to be covered: the NIH grant review process, developing specific aims and funding opportunities.

Guided by a faculty of leading researchers with extensive experience in all aspects of grant applications and funding, the program will focus on developing realistic expectations and provide tools for getting started. Faculty includes: G. Scott Gazelle, M.D., Ph.D., M.P.H., of Massachusetts General Hospital in Boston; Ruth Carlos, M.D., of the University of Michigan Health System in Ann Arbor; Elizabeth Burnside, M.D., M.P.H., of the University of Wisconsin in Madison; and Francis Blankenberg, M.D., of Lucile Packard Children's Hospital at Stanford University in Palo Alto, Calif.

The course fee is \$175. Register at RSNA.org/CGP. Contact Fiona Miller at 1-630-590-7741 or fmiller@rsna.org for further information.

Radiology in Public Focus

Continued from Previous Page

Media Coverage of RSNA

In June, media outlets carried 386 RSNA-related news stories. These stories reached an estimated 354 million people.

Print and broadcast coverage included *Los Angeles Times*, *Toronto Star*, *The Boston Globe*, *Orlando Sentinel*, *Boston Herald* and WOR-AM (New York, N.Y.).

Online coverage included Yahoo! Sports, *Los Angeles Times*, *TIME*, *The Boston Globe*, *San Francisco Chronicle*, *The Miami Herald*, *The Baltimore Sun* and *The Denver Post*.

September Public Information Activities Focus on Ovarian and Prostate Cancers

In recognition of Ovarian Cancer Awareness Month and Prostate Cancer Awareness Month in September, RSNA is distributing public service announcements (PSAs) focusing on symptoms of ovarian and prostate cancers, risk factors, screening methods and possible treatment options.

In addition to the PSAs, RSNA is also distributing the "60-Second Checkup" audio program to radio stations. The "60-Second Checkup" focuses on how pre-operative MRI may reduce the risk of nerve damage in prostate cancer surgeries.

Medical Meetings

September-October 2012

SEPTEMBER 13-16

European Society of Urogenital Radiology (ESUR), joint meeting of ESUR and the British Society of Urogenital Radiology (BSUR) Annual Scientific Meeting, Royal College of Surgeons in Edinburgh, Scotland
• www.esur2012.org

SEPTEMBER 15-19

Cardiovascular and Interventional Radiological Society of Europe (CIRSE), Annual Congress and Post-graduate Course, Centro de Congressos de Lisboa, Lisbon, Portugal
• www.cirse.org

SEPTEMBER 19-23

European Society of Neuroradiology (ESNR), Congress and Advanced Course, Edinburgh, Scotland
• www.esnr.org

SEPTEMBER 22-25

Canadian Association of Radiation Oncology (CARO), 24th Annual Scientific Meeting, Hyatt Regency, Vancouver, British Columbia
• www.caro-acro.ca

SEPTEMBER 30- OCTOBER 3

Radiation Research Society (RRS), Annual Meeting, Rio Mar Resort and Spa, San Juan, Puerto Rico
• www.radres.org

OCTOBER 3-7

American Society of Head and Neck Radiology (ASHNR), 46th Annual Meeting, Eden Roc Renaissance Hotel, Miami Beach, Fla.
• www.ashnr.org

OCTOBER 4-6

Society of Chairs of Academic Radiology Departments (SCARD), Fall Meeting, Fairmont Pacific Rim, Vancouver, British Columbia
• www.scardweb.org

OCTOBER 7-10

Radiology Business Management Association (RBMA), Fall Educational Conference, Sheraton Wild Horse Pass Resort, Chandler, Ariz.
• www.rbma.org

OCTOBER 12-13

European Society of Breast Imaging (EUSOBI), Annual Scientific Meeting, Hotel Rey Juan Carlos I, Barcelona, Spain
• www.eusobi.org

OCTOBER 31-NOVEMBER 3

Chinese Society of Interventional Radiology (CSIR) and Global Embolization Symposium and Techniques (GEST), 10th Scientific Meeting, Nanjing International Exhibition Centre, China
• www.2012csir.com/en

FIND MORE EVENTS AT
RSNA.org/calendar.aspx

Technology Forum

RSNA Mobile Connect Answers Your Trickiest Tech Questions

Unsure how to use a QR Code or post a Tweet? At this year's annual meeting, consider RSNA your own personal Geek Squad.

Designed to encourage meeting attendees to engage more interactively on their mobile devices, the all-new RSNA Mobile Connect, located in the Services Pavilion in McCormick Place, will provide trained experts to field the increasing number of questions users have about mobile technology.

Users entering RSNA Mobile Connect will be met by a greeter to guide them to the appropriate staff member for help with RSNA-specific and general technology questions. Tech experts will familiarize users with mobile device functions, download the Meeting Program, RSNA scientific journals, *RadiologyInfo.org* and more on *m.RSNA.org*, and demonstrate technologies like the digital presentation system used for RSNA DxLive™.

Along with a "Genius Bar" style layout (made famous by Apple retail stores) featuring iPads, iPhones and Android phones and tablets, RSNA Mobile Connect offers two "theaters" where users can watch mobile app demonstrations. Designed to optimize your annual meeting—and Chicago—experience, one theater will be devoted to RSNA apps and those related to exploring the city (such as making a dinner reservation), while the second theater will feature mobile app demonstrations by RSNA 2012 exhibitors and presenters. Each theater seats 10-15 people.

RSNA Mobile Connect will be open during regular Services Pavilion hours beginning Saturday, November 24. More information on RSNA Mobile Connect will appear in the October-November Annual Meeting Preview issue of *RSNA News*.

Virtual Meeting Packs More Content into RSNA 2012 Lineup

Offering even more content than last year, the RSNA 2012 Virtual Meeting allows users to experience the world's premier medical imaging event from anywhere in the world via the Internet with a Mac or PC.

Participants can access live streaming courses, Cases of the Day and new opportunities to earn up to 78.50 Continuing Medical Education (CME) credits*. In addition, "on demand" courses and sessions, scientific presentations, education exhibits and virtual technical exhibits will be available throughout the week.

Introduced in 2011, the Virtual Meeting is free for RSNA members and registered attendees, and no additional registration is necessary.

**This live activity has been approved for AMA PRA Category 1 Credit™.*

As an **RSNA member**, you are already registered for this free benefit. *Learn more at RSNA.org/Virtual_Meeting.aspx.*

**VIRTUAL
RSNA® 2012**
Patients First

Residents & Fellows Corner

RSNA Focuses on Residents Via Committee, Annual Meeting

At a recent meeting of the Resident and Fellow Committee (RFC), RSNA gathered suggestions as to how important Society programs, including annual meeting courses and MIRC Teaching Files, can serve trainees as well as more experienced radiologists.

At the meeting at RSNA Headquarters in Oak Brook, Ill., RFC members finalized plans for the Resident and Fellow Program at RSNA 2012. The program will consist of "Career 101—Planning for Success after Residency" and "Legal Aspects of Radiology."

RFC members also experienced enhancements to MIRC Teaching Files, RSNA's free, open source solution for managing, storing and sharing radiology files via web browser across institutions. Some RFC members noted they already use systems similar to MIRC— which

allows for storage and tagging of images and other data such as diagnosis or patient history—and suggested that MIRC may be even more useful to trainees if a case library is initially loaded by educators, and then residents add to the system as they come across relevant files.

The RFC recently helped RSNA establish Fellowship Connect, a searchable database of available fellowship positions throughout the U.S., available free to all RSNA members as a member benefit. Find it at fellowships.rsna.org.

RSNA is also keeping residents in mind when it comes to other annual meeting activities. To be offered at RSNA 2012 is a half-day workshop, funded by a GE Healthcare/RSNA Education Scholar Grant, designed to equip residents and fellows with the communication skills needed to discuss difficult diagnosis and

radiation safety with patients.

RSNA DxLive™, game technology that made its debut at the last annual meeting, returns this year. The game, which has participants using their personal digital devices to answer multiple choice questions about various case studies, was conceived following studies which suggested that adrenaline-increasing activities like competition aid in information retention. Trainees are involved in refining the technology for use as a teaching tool in residency programs; pilots are under way at several institutions.

RSNA residents and fellow members interested in volunteering with the RFC or any other RSNA committee can indicate their interest at www2.rsna.org/timssnet/About/volunteer.cfm.

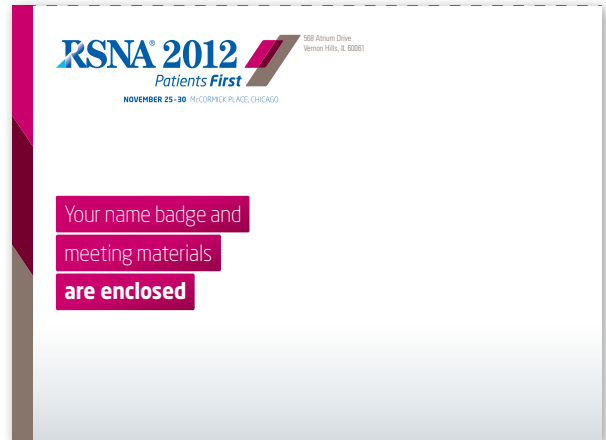
Annual Meeting Watch

Receive Registration Materials Prior to the Meeting

Register by Nov. 2 to receive the discounted registration fee and full conference materials mailed to you in advance. International visitors must register by Oct. 19 to receive these materials in advance. Registrations received after Nov. 2 will be processed at the increased fee and conference materials must be obtained at the McCormick Place Convention Center. No hotel reservations will be accepted after Nov. 2.

Name Badge

A name badge is required to attend RSNA courses or events or to enter the exhibit halls. RSNA will use radiofrequency identification (RFID) badge scanning technology within the technical exhibit halls. No personal information is stored in the RFID badge, only an ID number. Should you wish to "opt out" of this program, visit either Help Center onsite located in the Grand Concourse or Lakeside Center Ballroom on Level 3.



NEW! "Patients First" 5K Fun Run

Tuesday, November 27, 6:30 a.m.

Arvey Field, South Grant Park, Chicago

Enjoy a 5k event with your colleagues along Chicago's beautiful Lake Michigan shore and help fuel critical research to enable the best care for our patients. During online registration or onsite at McCormick Place, you can sign up as a runner or walker for the "Patients First" 5k Fun Run. The signup donation of \$30 will benefit the RSNA R&E Foundation and is fully tax deductible. Participants receive a commemorative T-shirt.



RSNA Meeting Program in Brief

A complimentary copy of the *RSNA Meeting Program in Brief*, an official meeting bag and a name badge lanyard can be obtained by presenting your voucher at the distribution counters located in the Grand Concourse, Level 3 (next to Starbucks) or Lakeside Center, Level 2, Hall E (near coat check).

RSNA 2012 Registration

How to Register

There are four ways to register for RSNA 2012:

1 INTERNET—Fastest way to register!

Go to RSNA.org/register

2 FAX (24 hours)

1-888-772-1888

1-301-694-5124

3 TELEPHONE

(Mon.-Fri. 8 a.m. - 5 p.m. CT)

1-800-650-7018

1-847-996-5876

4 MAIL

Experient/RSNA 2012

P.O. Box 4088

Frederick, MD 21705 USA

Registration Fees

BY NOV. 2 AFTER NOV. 2

BY NOV. 2	AFTER NOV. 2	
\$ 0	\$100	RSNA/AAPM Member
0	0	RSNA/AAPM Member Presenter
0	0	RSNA Member-in-Training, RSNA Student Member and Non-Member Student
0	0	Non-Member Presenter
165	265	Non-Member Resident/Trainee
165	265	Radiology Support Personnel
750	850	Non-Member Radiologist, Physicist or Physician
750	850	Hospital or Facility Executive, Commercial Research and Development Personnel, Healthcare Consultant and Industry Personnel
300	300	One-day registration to view only the Technical Exhibits

Important Dates for RSNA 2012

- Oct 19** Deadline for international badge mailing
- Nov 2** Deadline for housing and discounted registration
- Nov 21** Deadline for guaranteed seating to all ticketed courses
- Nov. 25 - 30** RSNA 98th Scientific Assembly & Annual Meeting



For more information about registering for RSNA 2012, visit RSNA.org, e-mail reginfo@rsna.org or call 1-800-381-6660 x7862.

Take in Chicago's Sights, Sounds at RSNA 2012

Chicago offers an exciting array of sights, sounds and scenes you can't afford to miss. RSNA will once again offer a series of exciting tours and events during the week. Here's a peek at some of the attractions coming to Chicago during RSNA 2012:

- Les Miserables at the Cadillac Palace Theater
- Don Pasquale and Werther at the Lyric Opera
- Disney's Fantasia at the Chicago Symphony Orchestra
- Vienna Boys Choir at the Chicago Symphony Orchestra

The lineup also features city tours, shopping excursions, culinary experiences, museum exhibits and much more. See what the city has to offer and secure your tickets at RSNA.org/Register, click Tours and City Events.



Michael Polenzani will sing the title role of Werther at the Lyric Opera.

Image by Dan Rest/Lyric Opera of Chicago



Book with Gant Travel for a Chance to Win!

RSNA attendees who book air travel through Gant Travel by September 28 will be entered into a drawing to receive a \$500 (USD) travel credit good toward future airfare on United Airlines.

Benefits of using Gant Travel for RSNA 2012 include:

- Fare-checker technology (checking for lower fares until your return flight home)
- Seat-checker technology (checking for the best available seats per your preference)
- Emergency assistance available by phone
- Flight monitoring alerts

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

Reserve Your Room Now

Discounted hotel room rates are available for RSNA attendees. To see the hotel list and room rates go to RSNA2012.RSNA.org. Don't delay and miss your chance to save. Register and make your hotel reservations today.

Guarantee Your Seat!

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

All ticketed courses must be confirmed prior to Nov. 22 to guarantee a seat. RSNA ticketed courses fill up fast, so ensure you get the courses you need by enrolling at RSNA.org/register. There is no onsite course ticketing. Registrants without tickets will be allowed entrance into a course after all ticketed registrants have been seated.

Course Enrollment

Seats are still available in many of the courses to be offered at RSNA 2012. Online registration occurs instantly, while faxed or mailed registration forms are processed in the order of receipt. The Registration, Housing and Course Enrollment brochure and online registration is available at RSNA.org/register. You must be registered for RSNA 2012 in order to enroll in courses.

Spouse/Family Member Badge: News for 2012

Full conference professional registrants are entitled to one complimentary spouse/family member badge; each additional badge is \$50. This badge is intended for use by a spouse or family member (over the age of 16) accompanying a full conference professional registrant to the meeting. It allows access to technical exhibit halls, Lakeside Learning Center and classrooms, space permitting, after all professional registrants have been seated. CME credit is not tracked or awarded. A co-worker or industry associate is not eligible for this badge and must register as a professional and pay the applicable registration fee.

The Value of Membership

Enhance Your Career with the Academy of Radiology Leadership and Management

Combining existing leadership and management courses under one umbrella, the Academy of Radiology Leadership and Management (ARLM) gives you the opportunity to enhance your career and develop as a professional. ARLM courses are offered by five sponsoring organizations: RSNA, the Association of University Radiologists (AUR), American Roentgen Ray Society (ARRS), the Society of Chairs of Academic Radiology Departments (SCARD) and the Association of Administrators in Academic Radiology Departments (AAARAD).

Medical imaging professionals can earn a Certificate of Achievement from ARLM by earning 50 education credits—at least 30 in person—across a spectrum of core learning domains, including financial skills, human resources, professionalism, legal/contracting, academic mission and general management. A minimum of three credits in each domain is required.

Courses taken over a three-year period can be applied to certificate requirements, while CME coursework from previous years may also count toward certification. There are no fees

beyond costs associated with CME activities, and many of those are free to members of the respective sponsoring societies.

The newly established www.radleaders.org is a valuable resource in planning and tracking ARLM achievements. Individuals can register and track their

progress towards earning an ARLM certificate through the site. The site also features a comprehensive list of ARLM-approved courses, allowing users to narrow their search by course name, type, year or domain. Each domain offers a variety of courses making it easy to work towards fulfilling ARLM goals.

Meetings Featuring ARLM-approved Courses

AAARAD 2012 Annual Educational Conference

Featuring 11 ARLM-approved courses across the domains of Human Resources, Financial Skills, and General Management
October 2-3, 2012 • The Fairmont Pacific Rim • Vancouver, British Columbia

SCARD 2012 Fall Meeting — Leadership & Management Program

Featuring 10 ARLM-approved courses across the domains of Human Resources, General Management, Financial Skills, and Academic Mission
October 4-5, 2012 • Fairmont Pacific Rim
• Vancouver, BC

RSNA 98th Annual Meeting and Scientific Assembly

Featuring 35 ARLM-approved courses
November 25-30, 2012 • McCormick Place • Chicago

ARLM courses offered during these meetings will cover a wide range of topics. Visit www.radleaders.org for a full list of ARLM-approved courses.



RadioGraphics: Another High-Impact Factor Benefit of RSNA Membership

RSNA members earn a great return on their membership investment in the continued success of the Society's journals. With the new impact factors just released in June 2012, *Radiology* remains the highest ranked general diagnostic imaging journal (5.726) and *RadioGraphics* earned a very respectable 2.854 rating, which places it among the highest ranked educationally focused radiology journals.

Each of the six 300-page issues of *RadioGraphics* covers a broad spectrum of radiologic subspecialties, with clinically relevant material that readers value for its consistent, exceptional quality and for being useful to their everyday practice. A seventh issue, focused on

one subspecialty area, is published annually. The special issue for October 2012 explores gynecologic imaging across a woman's lifespan. In addition to up-to-date clinical review articles, *RadioGraphics* also features a robust series on quality improvement and informatics topics. Recent articles covered automated solutions for archiving and reporting CT radiation dose estimates; using a smartphone for 3D image manipulation, and three basic principles, tools and steps for planning, setting up and carrying out radiology quality improvement projects.

With each issue, users can read 13 CME articles to earn up to 13 CME credits online. Participants join the ranks of thousands of radiologists who have been

using this RSNA member benefit since 2000.

One new member expressed his appreciation of *RadioGraphics* this way: "It would be incorrect to say that I am just satisfied. I am not just impressed but highly grateful to ... everyone who has made this possible. To some it may sound like exaggeration but only other doctors in developing countries ... can fathom how hard it is to get access to free, high quality and accurate medical information. I have used a lot of info and concepts from your articles in my training as a resident. ... Keep the good work and spirit of dissemination of life saving information going."

One Page Consolidates Science and Education Needs

Accessing the most critical, up-to-date RSNA-related science and education resources is now as easy as logging onto one page on the all-new *RSNA.org*.

The page spotlights need-to-know information on RSNA science and education offerings while allowing users to access content specific to each. The menu at left connects users to popular resources, while the blue box allows quick access to CME activity. Highlights include:

- ▶ **Things to Know:** Apply for RSNA workshops, programs and courses, purchase RSNA educational materials or learn how to prepare a grant application at this frequently updated portal for science and education.
- ▶ **Science:** Access resources including applications for popular grant writing programs, quality improvement tools and updates from the Quantitative Imaging Biomarkers Alliance (QIBA).
- ▶ **Education:** View the CME repository, access RSNA's extensive online education library, take RadioGraphics CME tests and more.
- ▶ **Resources:** Link to frequently referenced education and science resources.



Additional icons at the bottom of the page direct you to essential tools and interactive content relevant to your online experience.

COMING NEXT MONTH

The Meeting Preview double issue will get you ready for RSNA 2012. Also, a look at new research showing malpractice cases against diagnostic radiologists are dismissed about half the time, a slightly lower rate than overall dismissal among all specialties.



The finest breakthroughs

in medical imaging

emerge here.



RSNAFANS



#RSNA12

- ▶ **FREE advance registration for RSNA/AAPM members.**
- ▶ **Unparalleled continuing education opportunities.**
- ▶ **Technical exhibition showcasing nearly 700 exhibitors.**
- ▶ **Networking with professionals from more than 125 countries.**
- ▶ **Magnificent Chicago entertainment, dining and shopping experiences.**

Registration,
Housing
and Course
Enrollment
Now Open

Register online at

RSNA.org/register

This live activity has been approved for *AMA PRA Category 1 Credit™*

RSNA2012.RSNA.org

Radiological Society of North America
98th Scientific Assembly and Annual Meeting

November 25-30
McCormick Place, Chicago

RSNA® 2012
Patients First

