**President’s Column**

As breast imagers, we are dedicated to saving lives through early detection. Why? Because we know it works. Annual screening mammography for women, beginning at age 40, results in a significant reduction in breast cancer mortality. There is a large body of evidence that supports this claim. And yet again we find ourselves defending our efforts – to our patients, to our clinical colleagues, and to our health policy makers. The United States Preventative Services Task Force (USPSTF) did the women of our country a grave disservice by issuing recommendations in 2009 that failed to support annual mammographic screening for women beginning at age 40. There was not only proof to the contrary for this policy but the USPSTF deviated from their usual evaluation standards in order to make their recommendation against mammographic screening. A statistically significant benefit in breast cancer mortality reduction is there but instead the focus is on "harms"; as though patient anxiety and discomfort from the exam should be considered with the same weight as preventable death from breast cancer.

Of course, this is not news. If you have seen the excellent article by Hendrick and Helvie [1] or have been following the information on our SBI website, you know the issues. Dr. Daniel Kopans has helped frame the debate [2] and his commentary is available on our website as well. So what is new? The methodology used by the USPSTF has spilled over into Canada, where screening is now under attack in a fashion similar to the U.S. Dr. Cornelia Baines, who played an instrumental role in the Canadian National Breast Screening Study1 (CNBSS1), has been a vocal opponent of screening and is using this as an opportunity to gather attention to her views.

We may have a similar situation in the United Kingdom. A panel was just convened that will review the effects of mammographic screening and the resulting "overdiagnosis." Since it is no longer logical to argue that screening does not affect mortality rates (because it does significantly lower breast cancer mortality),...
President’s Column, continued from page 1

our detractors have latched onto the idea that mammography is creating too many unnecessary harms. We and the public are being told that we don’t really need to diagnose cancer early because much of this cancer – up to 50% -- would disappear if we just left it alone. The rest will be cured with chemotherapy. Those of us working in the field, who see breast cancer day in and day out, realize that this could not possibly represent reality. Have any of us seen a significant number of cancers regress on their own? Or even a small number of cancers behave this way? Surely, collectively, we would have had an opportunity to observe this phenomenon, if it is as widespread as the “overdiagnosis” crowd believes. Yet where is the evidence? Unfortunately, the lack of scientific data has not dissuaded the opponents of screening.

The UK panel has 2 of its 6 members firmly in the “overdiagnosis” camp. The SBI respects the rights of other organizations (and, of course, other governments) to establish their own values and goals. We also welcome a thorough review of the scientific literature on mammographic screening. However, we are concerned about the prospects of a fair and balanced review in the setting described. We will do what we can to voice our concerns in a clear and respectful manner. An update will follow in future newsletters.

What can you do? Make every effort to inform your patients and your referring physicians of the facts about mammographic screening. If you need help, consult the SBI website, where you will find information to help you converse comfortably with your local media and health officials (see “Resources – Screening Mammography”). Get involved at the state and national level. Let your congressional representatives know that denying women screening is short-sighted (and will ultimately lead to fewer women around to vote for them!). We need to make our voices heard. Mammographic screening saves lives. We know it. Let’s make sure everyone knows it.

Debra L. Monticciolo, MD
President, Society of Breast Imaging

References:

Have you visited the SBI Member Forum lately? Share your thoughts on the latest issues in breast imaging.
showed enhancement characteristics similar to that seen on MRI. Among 12 benign lesions, five had nodular enhancement that was falsely positive. That same year, John Lewin (2) and colleagues in Denver reported on 26 women studied with dual energy technique. Lewin et al reported that 11 of 13 invasive cancers strongly enhanced, one showed moderate enhancement and one weakly enhanced. Of 12 benign lesions, one weakly enhanced. In 2006, Clarisse Dromain (3) and her team at the Institut Gustave Roussy in Paris reported on 20 women with 22 cancers. Also using dual energy technique, they reported a sensitivity of 80% with a 97% correlation with tumor size.

Published studies have used two different contrast techniques. Temporal subtraction studies obtain multiple post-contrast images. The enhancement curve generated is reportedly similar to that obtained with MRI. However, the study requires that the patient stay motionless throughout the examination while she is sitting under light compression for at least 7 minutes. Imaging is done as a single view of one breast. Using the dual-energy subtraction technique, two images are rapidly obtained using low- and high-energy exposures. Images are then subtracted, showing the pattern of iodine uptake in the breast. The enhancement is seen in a single time point; flow dynamics are therefore not obtainable. The low energy image also provides a standard mammographic image. Because the time under compression is short, patient motion is decreased, and tolerance for the examination is increased. Because both images are obtained after the injection of iodinated contrast, imaging in any projection is possible. Using this technique, both breasts can be imaged, and both routine views of each can be obtained so a two-view bilateral study is possible after a single injection.

At Memorial Sloan-Kettering, we have been using this technology for an IRB approved study of women with known breast cancer, comparing results from MRI to those obtained from CEDM. In data presented at RSNA in 2010, we first evaluated the feasibility of performing bilateral, two view CEDM and found that it was easily tolerated by patients. We also found that imaging of tumor uptake of iodine was independent of the timing of imaging within a window of 2-8 minutes post-injection of Omnipaque 350™ at a rate and dose identical to that used for body CT. In assessing clinical utility, both MRI and CEDM detected 96% of 26 index cancers. Of all known cancer sites in all breasts, the sensitivity/specificity was 97%/81% for MRI and 91%/100% for CEDM. Slightly more cancers were detected by MRI, but the false positive rate of MRI was also higher.

In the studies of CEDM, published results have been based on women with known lesions. The usefulness of CEDM to detect cancer in a screening setting is as yet unknown, with both the true positive and false positive rates untested. Additionally, the technology which we have been using at Memorial Sloan-Kettering continues to be refined. Naturally, this may impact on results. As enhancement is made increasingly conspicuous, sensitivity may increase but specificity may be sacrificed.

It is also interesting to note that women with extensive background enhancement on MRI also show evidence of increased background enhancement on CEDM. This technique may then potentially be useful in quantifying breast cancer risk in women with dense breasts. However, this also lacks adequate supporting data to be used clinically.

In October, 2011 the FDA approved General Electric to sell CEDM in the US. It is premature to predict how flow assessment with mammography can replace the use of MRI to obtain similar information. However, it is exciting to imagine how in the future a contrast enhanced mammographic study for diagnosis or high risk screening may provide a level of information that was previously not obtainable.

Note from the Editor

As I write this, it is a beautiful day in early February. The sky is clear, the air is crisp. It feels like spring.

I am visiting the grave of my sister-in-law who died at age 38 years of metastatic triple negative breast cancer in 2007. In some ways, it feels like yesterday. Her short life is a constant reminder that we have a lot to do and learn about in breast imaging and all facets of breast care.

We are making progress. In this issue, Drs. Berg, Lee, and Redd report on exciting research presented at RSNA in December 2011. Also, Drs. Dershaw and Jochelson provide an update on an emerging technology, contrast enhanced digital mammography.

Also, in this issue, Dr. Farria outlines new suggested guidelines for interviews for breast imaging fellowships—a very important topic for our future. I hope that you will read Dr. Farria’s article and adhere to the new time schedule for fellowship interviews. After all, today’s fellows will be leading the field in the not too distant future.
What Every Mammography Technologist Would Like Their Radiologist To Know About: Image Quality (Part 2 of a 3 part series)

Louise C. Miller, RT RM

In part 1 of this series, we discussed the challenges that many technologists encounter when dealing with patients. These challenges often result in a compromise in image quality. This article, however, will not address those difficult patients that comprise approximately 15% of our patient population. Our focus, instead, will target the majority of our patients and the positioning standards we should all strive to achieve for screening and diagnostic examinations. Many radiologists complain about technologists who produce substandard images; many technologists complain about radiologists who are “too picky.” Hopefully, the following discussion will help to bridge the gap between these two perceptions. Technologists are often confused by a deviation of standards/policies/preferences between radiologists, especially those in large practices. We also want you to know that we need continued, ongoing communication and dialogue concerning these issues; education is the key to creating and maintaining excellence.

**Know the standards:**
There are specific criteria for evaluating standard screening views. Technologists and radiologists should be familiar with these positioning standards; unfortunately, some have not received proper training in this area. Lack of familiarity with the established criteria for clinical images can often result in a disagreement as to what is or is not acceptable. A good source for this information would be the image evaluation sheet which you receive in association with ACR Mammography Accreditation Program (MAP) process. Many facilities fail the positioning component of the accreditation process because the participants did not meet the basic criteria for each view. While we have discussed that there is a certain percentage of patients (approximately 10-15% of all patients) whose limitations will result in suboptimal images, the majority of images should achieve these standards.

**Repeat/rejects/additional views:**
Obviously there are times when technologists should repeat films: failure to achieve the accepted standards, artifacts (including superimposition of body parts), and other justified reasons. I often hear complaints from radiologists and technologists about skin and fat folds. On digital mammography, there is a higher prevalence of visualization of skin and fat folds, compared to film-screen mammography. Repeat images are not warranted unless the skin or the fat folds obscure visualization of an area of major concern.

Another common issue is the use of XCCL views as part of a standard screening examination. If the patient has prominent glandular breast tissue extending laterally on the CC views, and thus obscured from view on the standard screening views, an XCCL view should be performed on the baseline mammogram. Often the need for XCCLs can be eliminated if the technologist follows a proper CC positioning protocol which includes pulling on the lateral posterior breast tissue when positioning the CC view. This is one of the most commonly overlooked, important aspects of positioning and when performed properly will help eliminate the need for XCCLs. If, however, the XCCL is necessary on the baseline examination; on subsequent screening examinations, XCCLs need not be included. However, the MLO views must visualize glandular breast tissue back to the retromammary fat space. Additional views (including XCCLs) should be added as needed to visualize specific areas of concern.

Another common issue that causes unnecessary repeats/rejects/additional views is visualization of the nipple in profile. Many times, patients will present with prominent superior fullness in the breast which causes the nipple to “fold under” on the CC view. It is important to note that additional views are not needed if the nipple is visualized in profile on one of the two standard views AND there is no question of a subareolar mass. If a subareolar mass is suspected, then additional views will be needed.

As the two common situations described above indicate, it is critical that each department have set policies and procedures that are agreed upon by all radiologists in the practice and understood by all technologists. This will help to eliminate unnecessary repeat/reject/additional views and thus benefit productivity and patient care and eliminate frustration and misunderstandings.

**Training:**
Both radiologists and technologists should participate in an on-going image quality evaluation program. However, it should be understood that initial training (or retraining) should consist of methods that are consistent and reproducible. This type of training will help establish standards so that problems can be easily addressed and eliminated. Radiologists can also benefit from an understanding of positioning techniques so they can give appropriate feedback to their technologists. Checklists can be developed for feedback, repeat/reject records should be reviewed on a regular basis, and specific help should be given to those technologists needing it. Team building can be improved by scheduling an image evaluation session (perhaps twice yearly) where technologists and radiologists come together and review images in an informative and encouraging manner. This will go a long way to eliminating misunderstandings. A good lead technologist can be an excellent liaison between technologists and radiologists. Also, image evaluation should be an important part of every technologist’s performance evaluation.

For many years, Dr. Daniel Kopans titled many of his courses/lectures “The Team Approach.” Technologists and radiologists attended positioning classes, discussed image evaluation issues and common obstacles/barriers to achieving excellence. It is through this concept and common understanding and willingness to work together as colleagues that we can accomplish the best in image quality and subsequent patient care.
RSNA 2011 Highlights: Emerging Technologies in Breast Imaging

Bernadette Redd, MD

The Tuesday morning session at RSNA focused on recent breast imaging research, emphasizing the role of contrast-enhanced mammography, mammography with tomosynthesis (DBT), and the use of elastography with ultrasound (1). Several presentations describing promising lines of research caught the attention of Dr. Carl D’Orsi, from Emory University, one of the moderators at the well-attended Tuesday morning session.

Dr. Clarisse Dromain, from the Institute Gustave-Roussy in Villejuif, France, presented “Value of Contrast-enhanced Spectral Mammography (CESM) in Women with Newly Diagnosed Breast Cancers Compared to MRI: Preliminary Results.” Regarding CESM, Dr. D’Orsi noted, “This has the potential to do what MRI does but with better resolution and faster acquisition times.” Dr. Dromain’s research uses the concept of tumor enhancement resulting from tumor angiogenesis, more commonly associated with breast MRI, and applies it to enhanced spectral mammography. Spectral mammography uses a dual energy technique, which produces one set of images very similar to standard digital mammography and a second set of corresponding images highlighting sites of contrast enhancement. The CESM examination takes five to ten minutes, depending on whether one or both breasts are imaged. The radiation dose is reported to be about 1.2 times the dose delivered for two-view full field digital mammography (FFDM). The purpose of the study presented by Dr. Dromain was to assess the diagnostic accuracy of CESM compared with MRI for assessment of extent of disease in women with known breast cancer. Dr. Dromain's group concluded that CESM had good diagnostic accuracy in assessing the extent of breast cancer. For detection of primary tumors, the sensitivity was 94% (50/53) for CESM and 100% (53/53) for MRI. For detection of additional foci, the sensitivity was 90% (26/29) for CESM and 93% (27/29) for MRI. The positive predictive value was 98.7% for CESM and 94% for MRI. Dr. D’Orsi noted that this line of research is “even more interesting when married to photon counting, which will decrease dose.”

“Development of Low-Dose Photon-counting Contrast-enhanced Tomosynthesis with Spectral Imaging” was presented by Florian F. Schnitzberger, MS from Charité University of Medicine in Berlin, Germany. Schnitzberger and co-workers published a detailed report on this topic in the May 2011 issue of Radiology, indicating promising diagnostic benefits with low-dose photon counting DBT with a contrast agent (2). In October 2011, Diagnostic Imaging reported on the FDA approval of General Electric’s SenoBright Spectral Mammography Device for use in the USA, reportedly already in use in Europe and Japan (3).

“A Two-fold Dose Reduction in Breast Screening with Tomosynthesis (DBT) through the Use of Reconstructed 2D Images from the DBT Dataset?” was presented by David Gur, ScD from the University of Pittsburgh. The material from Dr. Gur’s presentation is detailed in an article published in Academic Radiology (February 2012) (4). The purpose of this study was to compare the interpretative performance of synthetically reconstructed two-dimensional images created from a set of DBT slices plus DBT versus directly acquired FFDM plus DBT. Dr. Gur et al noted the previously reported possible benefits of DBT including reduced benefits for screening mammography and improved detection of mass-like abnormalities. Dr. Gur and colleagues also noted that the combination of DBT and FFDM, as per the approved FDA practice, requires approximately doubling the radiation dose to the breast being imaged. Ideally reconstructed 2D images would make the additional FFDM images unnecessary and therefore reduce the radiation dose. Dr. Gur’s group found that FFDM combined with DBT had a moderately higher sensitivity than the current version of synthetically generated 2D projection images combined with DBT. However, Dr. D’Orsi noted, “currently Dr. Gur showed this was not as good as the standard 2D but the technique of creating the 2D image has markedly improved. If it is shown that this creation is the same as the 2D, then the dose can be markedly decreased.” The hope of Dr. Gur’s group is that improvements in the quality of the synthesized 2D images could lead to acceptable diagnostic quality with acquisitions of only DBT data, eliminating the need for double exposures during DBT-based screening.

References

Breast MRI Accreditation Program Update after MIPPA Deadline

The Medicare Improvements for Patients and Providers Act (MIPPA) deadline of January 1, 2012, has come and gone. Under this act, any private outpatient facility billing Medicare Part B was required to accredit all diagnostic imaging modalities in order to be eligible for reimbursement. Breast MRI was the only breast imaging modality that fell into this category.

From its launch on May 10, 2010 up until the MIPPA deadline of January 1, 2012, ACR’s Breast MRI Accreditation Program received 1182 accreditation applications. During the span of a year and half, 763 of these facilities were approved. In a push to accredit as many facilities as possible, 367 Pass/Fail reports were written in November and December 2011 alone.
This special session presented at RSNA 2011 provided an overview of current and emerging breast cancer screening technologies. The session was moderated by Dr. Carol Lee of Memorial Sloan-Kettering Cancer Center and speakers were Dr. Janice Sung, also from Memorial Sloan-Kettering, who gave an update on the status of screening MRI; Dr. Jean Weigert, from the Hospital of Central Connecticut, who presented a perspective on screening ultrasound; and Dr. Margarita Zuley, from the University of Pittsburgh, who spoke about tomosynthesis.

Dr. Lee summarized the varying screening mammography guidelines among different medical organizations and discussed the continuing attacks on screening. She stated that it is unclear whether the controversy is resulting in decreased utilization of screening mammography but presented some evidence suggesting that this may be the case, including data published by the FDA on its MQSA website that showed that the number of mammograms done within the past 12 months had the smallest increase in five years. However, the true impact, if any, of conflicting screening guidelines and continued attacks on screening mammography have yet to be determined.

Dr. Janice Sung gave an update on the use of MRI for high risk screening, presenting the current guidelines as well as new evidence confirming the utility of screening MRI in women with a history of prior chest irradiation. She also reviewed new evidence that MRI may be helpful in some women who are below the 20% lifetime risk for breast cancer, including those with a personal history of breast cancer and those with prior biopsy proven lobular carcinoma in situ. Dr. Sung went on to discuss some of the challenges associated with the use of MRI to screen, including the difficulty in determining the level of an individual woman’s lifetime risk. Different risk assessment models yield variable results. In addition, there are challenges associated with interpretation of breast MRI examinations. Dr. Sung concluded by naming areas needing further study, including defining which populations are best suited for screening with MRI, cost effectiveness, ways to improve interpretive performance, and determining the impact of MRI screening on breast cancer mortality.

Dr. Jean Weigert gave a discussion of screening breast ultrasound from the perspective of a radiologist practicing in Connecticut, the first state to pass a law mandating direct patient notification of breast density. The Connecticut bill not only requires that patients be told of their breast density in the lay letter conveying their mammography results but also requires that the letters include language telling women who have dense breasts that they should consider supplemental screening with ultrasound, MRI, or both. Not surprisingly, this has lead to a marked increase in the number of screening breast ultrasound examinations ordered in Connecticut. Dr. Weigert presented pooled data from six different practices in the state. Among the participating facilities during the 12 month period from October 2009, when the law went into effect, to October 2010, 8651 screening ultrasounds were performed and 28 cancers were diagnosed. The cancer detection rate was three cancers per 1000 women and the positive predictive value of biopsy was 6.5%. These numbers are in line with other studies of screening ultrasound.

Dr. Weigert’s presentation was particularly important given the fact that legislation mandating direct patient notification of breast density has been passed in Texas and is pending in several other states, including New York and Florida. In addition, there is a bill on the floor of the U.S. House of Representatives which would make the mandate a national policy. It will be important to continue to monitor the experience in Connecticut as a possible indication of what will happen with screening ultrasound in the future. Of note is the fact that the Connecticut legislature also passed a law mandating insurance coverage for screening ultrasound and MRI. In California, a bill similar to that in Connecticut passed but was vetoed by the governor, possibly because of cost considerations. Future areas of study suggested by Dr. Weigert include careful cost-benefit analysis and the development of automated whole breast ultrasound systems that could help practices meet increased demand.

Finally, Dr. Rita Zuley reviewed current knowledge about the use of tomosynthesis for screening. Several studies have reported that tomosynthesis results in reduced recall rates compared to conventional 2D digital mammograms. In terms of increased lesion detection, there is evidence that tomosynthesis is superior to 2D mammography for masses and distortion but not as compelling that it is better for the detection and characterization of calcifications. Dr. Zuley also discussed radiation dose. Currently tomosynthesis is FDA approved to be used only in conjunction with and not as a replacement for 2D mammography. Therefore, the dose is at least doubled and it has not yet been firmly established that this is justified for the entire population of women who are undergoing screening. Another consideration that she discussed is cost. There is no CPT or temporary G code for tomosynthesis and most facilities are coding tomosynthesis as unlisted (76499) with no guarantee of reimbursement. Dr. Zuley recommended that each facility set the technical and professional rate for tomosynthesis internally, that the radiology report state that tomosynthesis was used and why, and that patients be informed beforehand that insurance may not cover the bill and that the patient might be responsible for the charge. Another consideration that Dr. Zuley discussed was the fact that tomosynthesis has been shown to be associated with increased interpretation time compared to 2D mammography. Dr. Zuley stated that future developments may include further reduction in dose as well as post-processing that allows 2D rendering, thus obviating the need for the 2D mammogram.
The Member Newsletter of the Society of Breast Imaging

**Breast Ultrasound Accreditation Q & A**

Marion Boston, RT (R)(M)
Assistant Director, ACR Breast Imaging Accreditation Programs

Going through the accreditation process can be a stressful time and it generates many questions. The following questions are actual ones received by the ACR regarding this program. To see more FAQs on this topic, please visit the ACR website.

**QUESTION:** May our physicians double read in order to meet the continuing experience requirements?

**ANSWER:** Yes, double reading (two or more physicians interpreting the same examination) is acceptable to meet the continuing experience requirements. Interpreting physicians may also re-interpret a previously interpreted examination and count it towards meeting the continuing experience requirement, as long as he/she did not do the initial interpretation.

**QUESTION:** We have just installed a new 3-D automated whole breast ultrasound system. May I submit images from this unit for accreditation? If I am already accredited in breast ultrasound with the ACR, will this negatively influence my accreditation status?

**ANSWER:** No. The ACR Breast Ultrasound Accreditation Program does not accept images from 3-D whole breast ultrasound systems. However, adding this type of ultrasound unit would NOT jeopardize your accreditation as long as your facility maintains a conventional hand-held ultrasound system to maintain your accreditation and accredits upon renewal. In addition, all individuals who meet our breast ultrasound accreditation requirements must operate all ultrasound equipment (including the 3-D system). If an ACR-breast ultrasound accredited facility uses unqualified operators, we could revoke their accreditation.

**QUESTION:** What exactly is the “center frequency”? The Program Requirements state that breast ultrasound procedures must be performed on appropriately equipped ultrasound units operating at a center frequency of at least 10 MHz and preferably, higher.

**ANSWER:** The center frequency is usually the frequency designated on the transducer. Because each ultrasound system is different, you should contact the manufacturer of the ultrasound equipment if you have any questions.

**QUESTION:** I would like to submit a case where the cyst/mass is only visible on the 2-view spot compression mammograms. It is not visible on the routine CC and MLO views. May I submit only the spot compression mammograms?

**ANSWER:** No. You must submit standard full-view mammograms (e.g., CC and MLO, CC and ML, CC and LM) that show the cyst/mass under evaluation in both views so that the reviewer may determine the location of the cyst/mass within the breast. However, you may also submit projections such as compression spot views or magnification views to further demonstrate the cyst/mass. As with the standard views, the cyst/mass must be clearly circled.

**QUESTION:** Our facility only does fine needle aspiration on lymph nodes. May we submit these images for the FNAC in the Ultrasound-Guided Breast Biopsy Module?

**ANSWER:** No. If you only perform FNAC of lymph nodes, you should not submit these cases for accreditation. However, if your facility starts performing FNAC of solid breast masses in the future, you may add this module and apply for FNAC at that time.

**QUESTION:** May I submit the same case for both the Breast Ultrasound solid mass and the Ultrasound-Guided Breast Biopsy core needle biopsy exams?

**ANSWER:** Yes. But to ensure that the exam is evaluated properly, you must print only the requested images for the solid mass on one film and the requested images for the core needle biopsy on a separate film. Be sure to label them appropriately (i.e., use the “solid” labels on the first film and the “CNB” labels on the second).

**ACR 35th National Conference on Breast Cancer**

April 13-15, 2012 | Hollywood, FL

Earn modality-specific credits in biopsy, digital mammography, MRI, mammography and ultrasound.

acr.org/ncbc2012 | 1-800-373-2204
Breast Imaging Rejoins NAPBC

Jay Baker, MD and Peter Jokich, MD

This past fall, eight breast imagers, including two from the SBI, rejoined the board of directors of the National Accreditation Program for Breast Centers (NAPBC). What is the NAPBC? The website for the organization describes it succinctly as “a consortium of national, professional organizations dedicated to the improvement of the quality of care and monitoring of outcomes of patients with diseases of the breast. This mission is pursued through standard-setting, scientific validation, and patient and professional education [1].” The NAPBC offers accreditation to breast-related health care facilities that meet minimum requirements in areas including “early detection, diagnosis, pre-treatment evaluation, staging, optimal treatment, rehabilitation, surveillance for recurrent disease, support services, and end-of-life care.” The program is similar to ACR accreditation required for mammography centers, but NAPBC accreditation covers other aspects of breast care besides imaging. To date, 365 breast cancer centers have been accredited by the NAPBC since the program began accrediting centers in 2008.

The NAPBC was created in 2005 but required several years of development before it actually started accrediting breast centers. The board of directors has been expanded since NAPBC was first begun, and the board is currently comprised of approximately 20 organizations representing a wide spectrum of groups with an interest in excellent breast care. These groups include breast, plastic, and general surgeons; oncologists; radiation oncologists; pathologists; obstetricians-gynecologists; genetics counselors; and social workers. The ACR was invited to participate on the original board in 2005, and the SBI was not initially included. Shortly thereafter, at the request of the ACR, the SBI was invited to join. The initial group of four radiologists stepped down in protest when they were outvoted by a larger number of surgical members on issues regarding imaging and image-guided biopsies.

In 2010, the NAPBC contacted representatives of the SBI and the ACR to request that radiologists reconsider involvement with the program. Through considerable negotiation, the board of the NAPBC agreed to seat eight radiologists on the board of directors – equal to the number of surgeons serving on the board. The leadership of the SBI considered this offer so that radiologists could have a voice in the standards set by this accrediting body. Subsequently, two representatives were selected to represent each of four radiology organizations: SBI, ACR, American College of Radiology Imaging Network (ACRIN), and the American Institute of Radiological Pathology (AIRP). By the summer of 2011, the radiologists formally agreed to re-join the NAPBC in an attempt to offer an imaging perspective on standards and accreditations, with the goal of maintaining excellent quality care.

On October 24, 2011, the NAPBC held its first board meeting with full radiology participation. In a San Francisco hotel, the representatives of the member organizations gathered to welcome back the radiologists and discuss the business of the group. During this meeting, Dr. Cary Kaufman, a breast surgeon and president of the organization, noted that one substantial problem faced by the NAPBC was lack of compliance with ultrasound and stereotactic biopsy guidelines. This important issue was not discussed further at the fall board meeting; however, this will be a focus of considerable attention for the new radiology board members going forward.

In order to get the radiologists actively involved, they were encouraged to join committees such as the standards and accreditation, access and utilization, education and dissemination, and quality Improvement and information technology committees. The executive committee of the NAPBC is comprised of the chairs of each standing committee along with the president and vice-president of the organization. As a good faith gesture and to catalyze the radiologists’ involvement in all facets of the organization, the board voted to offer a one-year appointment to the executive committee for one member of the radiology group. The eight members of the four organizations representing the breast imagers unanimously selected Dr. Carl D’Orsi as the radiology representative on the executive committee.

Other issues discussed at the October 2011 board meeting included a desire to determine whether breast centers that obtain NAPBC accreditation improve the quality of care offered at their sites. The impact is difficult to assess because many centers work to improve their operations before applying for NAPBC accreditation, making it a challenge to measure a center’s baseline status. Standards for acceptable training of genetics counselors at accredited facilities were discussed. Arguments were made for and against requiring intensive training, with some arguing that continuing medical education courses offered by commercial laboratories with potential conflicts of interest should not suffice.

The agreement by breast imagers to participate in the NAPBC is not without controversy, as some believe that the prior involvement of radiologists (1) did not affect the actual standards adopted by the organization and (2) gave the appearance of endorsement by radiologists of standards lower than those required for ACR accreditation. The hope is that with more radiologists now represented on the board of directors and more specialties such as pathology and obstetrics and gynecology now involved in the organization, that the radiology representatives can have a greater impact on the standards set by the NAPBC for accreditation, in order to promote better patient safety. Improving patient care and safety will be the primary focus for the radiologists who have accepted their new roles in the NAPBC.

References

1. http://napbc-breast.org/about/what.html

Like SBI on Facebook and Follow SBI Twitter!
Commission on Breast Imaging

Chair: Barbara Monses, MD, FACR  
Staff: Pamela Wilcox, RN, MBA and Priscilla Butler, MS, FACR

In an effort to inform breast imagers of the efforts of the ACR, the following brief summary of recent activities of the Breast Commission is presented. While the name of the Chair of each Committee is mentioned, it is important to remember that the products reflect the hard work of many committee member volunteers who are generous with their time and expertise.

Practice Guidelines and Technical Standards & Appropriateness Criteria

Chair: Mary Mahoney, MD, FACR  
Staff: Christine Waldrip and Margaret Wyatt

- **Appropriateness Criteria (AC)**
  - Being updated - Microcalcifications
    - Initial Diagnostic Workup: Palpable Masses, Stage I Carcinoma
  - New AC topics: Breast Pain, High Risk Screening

ACR Practice Guidelines

- Adopted at the May 2011 AMCLC: Breast Ultrasound Examination; Magnetic Resonance Imaging-Guided Breast Interventional Procedures (NEW)
- Under development: Imaging Management of DCIS and Invasive Breast Carcinoma.
- Finalizing for the 2012 AMCLC: ACR–AAPM–SIIM Practice Guideline for Determinants of Image Quality in Digital Mammography (The Medical Physics committee is the lead on this)

BI-RADS®

Chair: Carl D'Orsi, MD, FACR  
Staff: Wil Creech and Priscilla Butler

The 5th of Edition of the BI-RADS® for Mammography (2nd Editions for Ultrasound and MRI) is nearing completion, and should be ready for electronic publication by spring 2012. A limited number of hard copy books will be printed.

Communications

Chair: Carol Lee, MD, FACR  
Staff: Shawn Farley

The committee is perpetually active, as the controversy over screening mammography continues to rage. This committee, often in collaboration with the SBI, responds to publications in journals and the media, and statements are posted on the ACR and SBI website quickly, so that members can be informed. Since January 1, 2011, ACR spokespersons appeared in more than 400 lay and medical press articles and segments.

The Mammography Saves Lives (MSL) public service campaign, in collaboration with SBI and the American Society of Breast Disease (ASBD), provides information regarding the importance of mammography, an opportunity to sign up to receive e-mail reminders to get an annual mammogram, and podcasts from prominent mammography leaders. MSL Facebook and Twitter pages are used to actively engage MSL followers.

Economics

Chair: Ellen Mendelson, MD, FACR  
Staff: Stephanie Le

This committee works closely with the Economics Committee to review existing codes coming up for review, and it helps to determine if new codes are appropriate. It also responds to proposed government changes. CPT-RUC has a workgroup for bundling CPT codes used together 75% of the time or more. This might affect the practice of breast imaging procedures, since multiple codes are utilized together much of the time (stereotactic breast biopsy and pre-operative needle localization).

Education

Chair: Debra Monticciolo, MD, FACR  
Staff: Ellen Brown

The 6th Mammography Case Review (MCR) is complete, but since much of the material is based on the new BI-RADS®, release is being postponed until Version 5 is published. CD #6 was awarded 12 AMA PRA Category 1 Credits™ and 3 SAM credits. Development of MCR 7 will begin in early 2012.

ACR is conducting an outcomes study on the MCR CD #6 in collaboration with the National Mammography Database (NMD), designed to measure the impact of the CD on the learner.

Jointly, ACR and SBI are updating the resident and fellow breast imaging curriculum and conducting a survey of breast imaging fellowships. The purpose is to better define fellowship availability, characteristics, timelines and subsequent employment.

Government Relations

Chair: D. David Dershaw, MD, FACR  
Staff: Gloria Romanelli

A strong patient-driven grassroots movement has sought state legislation requiring radiologists to provide written breast density information to patients as part of their mammogram results. The specifics and scope of the legislation, and the degree of success has varied by state. At a Federal level, Representative DeLauro of Connecticut has drafted a bill entitled “The Breast Density and Mammography Reporting Act of 2011” which, if successful, would modify MQSA to require reporting of density in the lay letters. The ACR and the SBI provided testimony to the FDA at the National Mammography Quality Advisory Committee. Neither organization opposes inclusion of breast density in the lay letter but urged consideration of many issues. The Committee is developing sample language for the lay letter that can be provided to the FDA and state chapters where legislation is pending.

Screening and Emerging Technologies

Chair: Edward Sickles, MD, FACR  
Staff: Pamela Platt

This group has worked together with the Communications Committee to respond to requests about new technologies and challenges to mammography screening.

The committee is monitoring the development and deployment of new applications of digital mammography, including breast tomosynthesis and contrast enhancement, as well as the use of whole breast ultrasound.

Other projects:

**Breast Imaging Centers of Excellence (BICOE)**

BICOE is a collaborative effort between the Commissions on Quality and Safety and Breast Imaging. There are more than 790 centers of excellence as of January 2012. Applications for ultrasound, stereotactic and ultrasound breast biopsy have also grown as a direct result of BICOE. The Breast MRI Accreditation Program is just over a year old, and as of January 1, 2012, 1999 units at 1816 facilities are accredited, or are in the process of being accredited.

National Mammography Database (NMD)

In the fall of 2012, the ACR announced that BICOE sites could participate in NMD free for the first year. Since the offer was made, 32 new sites have applied for a total of 62 sites. Data from over 1.5 million mammograms are currently in the registry.

Other members of the Commission:

**Council Steering Committee:**

Richard Strax, MD, FACR  
**Society of Canadian Radiologists:**

Linda Warren, MD, FACR  
**American Cancer Society:**

Robert Smith, PhD  
**Physicist Consultant:**

R. Edward Hendrick, PhD, FACR
Do you or your staff need help navigating the ACR Breast Imaging Reporting and Data System ("ACR BI-RADS")? In each issue of the newsletter, I will offer frequently asked questions (FAQs) that are of particular interest to breast imagers. You are invited to check out the ACR’s BI-RADS® web site portal for all of the BI-RADS® FAQs (go to www.acr.org, click “Quality and Safety Resources” and then select “BI-RADS® Atlas”). Also, please visit the ACR Breast Imaging Resources Page for an extensive selection of useful links.

Does the ACR have information regarding physician mammography outcome analysis software?

Yes, the ACR has a list of licensed vendors on our website at BI-RADS®Software Vendors List. All have medical audit software. In addition, participation in the ACR’s National Mammography Database (NMD), using one of our licensed vendors, provides an additional option. Participants will receive reports that meet and exceed the FDA’s audit data collection requirements with minimal effort on the part of the radiology practice. NMD leverages data already collected by mammography facilities to provide semi-annual feedback reports for important data such as cancer detection rates, positive predictive value rates, and recall rates. Most importantly, participants receive the Breast Cancer Surveillance Consortium (BCSC) benchmarks as part of their report, alongside annually updated comparisons to other NMD participants. For additional information on NMD, please visit https://nrdr.acr.org/Portal/NMD/Main/page.aspx

Is it necessary for a facility to separate the medical audit into screening and diagnostic patients?

No. Although a facility will obtain more statistically relevant information by separating their analyses for screening and diagnostic examinations, FDA regulations allow the facility to combine all patients into one group of audit data. The ACR strongly recommends that screening and diagnostic examinations be audited separately.

When doing medical audits, are pathology-proven “high risk lesions” described on page 300 in the BI-RADS® Atlas (i.e., atypical ductal hyperplasia, atypical lobular hyperplasia, lobular carcinoma in situ, peripheral duct papillomas, and phyllodes tumors) considered positive?

No, these are considered negative pathology results.

We always do a post-procedure mammogram after an ultrasound-guided biopsy. We bill for the mammogram separately from the biopsy procedure and use the FDA’s final assessment of “Post Procedure Mammograms for Marker Placement.” However, because this final assessment is not included in the current ACR BI-RADS® Atlas, our software vendors have not provided this option in their medical audit software. Consequently, we cannot include these studies in our annual medical audit. Do you have any suggestions how we can include these cases?

Some facilities consider the post-clip mammogram as part of the ultrasound interventional procedure and consequently do not bill for it or code it. Other facilities that choose to code it (and bill for it) separately wait for the result of the biopsy and then code the mammogram accordingly. For example, if the pathology was benign, they would code the mammogram as a Category 2; if the pathology was malignant, they would code the mammogram as a Category 6. In either case, it is not appropriate to include these outcomes in your medical audit because the purpose of the examination is only to assess for successful clip placement rather than to assess for the presence or the absence of malignancy.

SBI Awards Four New Fellows

On November 28, 2011 at the SBI Fellows Meeting during RSNA in Chicago, four members were recognized and presented as new Fellows of the Society. Please join us in congratulating: Cecilia L. Mercado, MD, Assistant Professor in the Department of Radiology at NYU Langone Medical Center in the Breast Imaging Division and has been recently named the Associate Director of the Diagnostic Radiology Residency Program; Cherie Kuzmiak, MD, Chief of the Breast Imaging Division at the University of North Carolina since 2005; Katrina Glazebrook, MBChB, Former Division Head of Breast Imaging at Auckland Hospital and is now a breast imager at Mayo Clinic Rochester; Pavel Crystal, MD, Completed training in diagnostic radiology at Soroka University Medical Center in Beer-Sheva, Israel. He undertook his Breast Imaging Fellowship at University of Toronto. If you are interested in becoming a fellow of the Society of Breast Imaging the criteria and nomination form can be found on the SBI website: www.sbi-online.org.
Breast Imaging Fellowship Selection Process: New Guidelines

Dione M. Farria, MD, MPH

Applying for a radiology fellowship is an exciting time for many residents. If you have been practicing radiology for several years or more, you may remember applying for a radiology fellowship as a low-key process, which was fairly uneventful. Unfortunately, this process has become more stressful over recent years for residents and programs alike. When did things start to change?

After the NRMP (National Residency Match Program) for radiology fellowships failed a few years ago, the landscape for applying to breast imaging fellowships started to change. The match program was an attempt to organize the application process to ensure that programs interviewed and selected fellows on the same timeline. This attempt to “level the playing field” was unsuccessful, in part because only ~90% of programs participated. The programs that opted out had the competitive advantage of interviewing and selecting candidates before programs registered in the match, as the programs in the match were obligated to follow a specific timeline. When the match failed, free market competition ensued.

Unfortunately, the race to interview and recruit the best fellowship candidates before other programs has created significant challenges for many residents. To stay ahead of the pack, some programs have started interviewing candidates in the spring of their second residency year. For breast imaging, this is particularly problematic. By the end of the second year, some residents have not had any breast imaging rotations, and many others have only had one month or less of exposure. It is difficult to make an informed decision about subspecialization with such limited experience. In some instances, the pressure to accept or decline an offer within a short time period (e.g., 48 hours) contributes to the stress.

The negative impact of the current fellowship interview process on applicants may be evident, but there are unintended consequences for fellowship programs, as well. The long gap between acceptance into a program and actually starting the fellowship increases the likelihood that an “accepted” fellow will change his or her plans and not matriculate in the program. The intense nature of the overall process contributes to a generalized anxiety for both programs and applicants.

To address complaints about the current system, SCARD (Society of Chairs of Academic Radiology Departments) adopted a resolution by unanimous vote: “Beginning with radiology fellowships with start dates in July, 2014, SCARD believes that all fellowships should begin their interviewing season no sooner than the beginning of February of the resident’s R3 year (which would therefore correspond initially to the Spring of 2013), and that offers to external candidates not be made until May 1 of the R3 year (corresponding initially to May 1, 2013).” This information is summarized in the table below.

The AUR (Association of University Radiologists), SCARD, and APDR (Association of Program Directors in Radiology) will list all participating programs on a joint website. Although program participation is not mandatory, all breast imaging fellowships should participate to standardize the current chaotic process. As a subspecialty, breast imaging can lead the way and show that we are sensitive to the needs of the trainees.

<table>
<thead>
<tr>
<th>Program Action</th>
<th>Recommended Dates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Interview Cycle</td>
<td>February – April, 2013</td>
</tr>
<tr>
<td>Start Offering Fellowship Positions</td>
<td>May 1, 2013</td>
</tr>
<tr>
<td>Fellowship Starts</td>
<td>July 1, 2014</td>
</tr>
</tbody>
</table>

Upcoming Events & Activities

<table>
<thead>
<tr>
<th>2012</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>February 18 – Dallas, TX</td>
<td>SBI Program Planning Meeting</td>
</tr>
<tr>
<td>April 21 - 25 - Washington, DC</td>
<td>ACR Annual Meeting &amp; Chapter Leadership Conference</td>
</tr>
<tr>
<td>June 9 – Chicago, IL</td>
<td>SBI Board of Directors Planning Meeting</td>
</tr>
<tr>
<td>September 1</td>
<td>Deadline for submission of 2012 SBI Fellows Applications</td>
</tr>
<tr>
<td>September – Date TBD</td>
<td>SBI Weekend MRI Education Course</td>
</tr>
<tr>
<td>October 2012</td>
<td>Breast Cancer Awareness Month</td>
</tr>
<tr>
<td>November 26 – Chicago (RSNA) 6:00 – 8:30 p.m.</td>
<td>SBI Fellows Meeting</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>2013</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>January – Date TBD</td>
<td>SBI Weekend MRI Education Course</td>
</tr>
<tr>
<td>April 6 - 9 - Los Angeles, CA</td>
<td>SBI 11th Postgraduate Course</td>
</tr>
<tr>
<td>May 4 - 8 - Washington, DC</td>
<td>ACR Annual Meeting &amp; Chapter Leadership Conference</td>
</tr>
</tbody>
</table>
Find the **people** and **careers** driving innovation.

Visit the Society of Breast Imaging Career Center, where we’re bringing professionals and employers together in the radiology community. Recruit top talent, find jobs and get connected.

Visit the SBI Career Center today!

sbi-online.org