

SUPPLEMENT TO  
NOVEMBER 2016

# APPLIED RADIOLOGY®

THE JOURNAL OF PRACTICAL MEDICAL IMAGING AND MANAGEMENT

## The Pursuit of Excellence in Breast Health: Challenges, Opportunities, and Successes



AN EXPERT FORUM ON THE CURRENT STATE OF BREAST IMAGING

Sponsored by





# All women deserve high-quality breast care.




## But it's not easy to deliver. The GE Breast Health Advantage can help.

We know it's not easy, starting with a diverse patient population with varying needs and risks. In fact, nearly half may have elevated risks or complicating factors that could impact the effectiveness of traditional screening and diagnostic methods. You likely have other goals, such as lowering recall rates and shortening wait times for results.

And if that's not enough, you must manage the shifting reimbursement landscape, evolving care pathways, new technologies, the impact of the Accountable Care Act and USPSTF recommendations, to name a few.

We'd like to help. To learn more about the GE Breast Health Advantage and our adaptable portfolio of products, services and insights to help you care for every woman, every body, contact your GE sales representative or visit [gehealthcare.com/breasthealth](http://gehealthcare.com/breasthealth).

## Breast Health Programs Challenges & Opportunities

-  Managing Evolving Care Pathways
-  Adapting to Shifting Reimbursement
-  Optimizing Capital & Operating Budgets
-  Competing for Patients & Physicians
-  Improving Treatment Appropriateness & Clinical Outcomes
-  Optimizing Operational Workflows & Assets
-  Reducing Recall Rates
-  Shortening Time-to-Diagnosis
-  Evaluating and Cost Efficiently Integrating New Technologies



# APPLIED RADIOLOGY®

THE JOURNAL OF PRACTICAL MEDICAL IMAGING AND MANAGEMENT

## Group Publisher

Kieran N. Anderson

## Executive Editor

Joseph F. Jalkiewicz

## Art and Production

Barbara A. Shopiro

*Applied Radiology* and this supplement, *The Pursuit of Excellence in Breast Health: Challenges, Opportunities, and Successes*, are published by Anderson Publishing, Ltd. The journal does not warrant the expertise of any author in a particular field, nor is it responsible for any statements by such authors. The opinions expressed in this supplement are those of the authors. They do not imply endorsement of advertised products and do not necessarily reflect the opinions or recommendations of our sponsors or the editors and staff of *Applied Radiology*.

Copyright © 2016

Anderson Publishing, Ltd.,

180 Glenside Avenue,  
Scotch Plains, NJ 07076

All rights reserved.

## Introduction

Sarah Conway, MD

To describe today's healthcare is to borrow from Charles Dickens: It is the best of times, and it is the worst of times.

We radiologists have some of the finest technology available at our disposal; digital mammography, 3D digital breast tomosynthesis, automated breast ultrasound—these and others are dramatically increasing our ability to find cancers and save lives.

Yet, at the same time, we work in an era of chaos and confusion. High health insurance costs and flawed decision-making—often made by bureaucratic entities with little knowledge of radiology—are becoming widespread. Valid, evidence-based breast-cancer screening guidelines are being pushed to the side in favor of watered-down guidelines with little or no such support.

Indeed, we stand at a crossroads; this is why five of my colleagues and I recently gathered in Chicago to discuss these and other issues of importance to breast health. This supplement represents a summary of the outcomes of our forum.

Our collective hope is that what you learn here will not only spark similar conversations at your institution, but will also inspire you to pursue excellence in every aspect of your own efforts to provide your patients with the very best of breast health care.

## Panel Participants



**Panel Moderator**  
Sarah Conway, MD  
President  
Delphi Radiology  
Associates Consulting



Erin I. Neuschler, MD  
Assistant Professor of Radiology  
and Director of Clinical Research  
Department of Breast Imaging  
Northwestern University



William R. Poller, MD, FACR  
Director, Division of Breast Imaging  
Allegheny Health Network System



Georgia G. Spear, MD  
Director of the Clinical Breast MRI Program  
Clinical Assistant Professor of Radiology  
Department of Breast Imaging  
NorthShore University Health System



Nina S. Vincoff, MD  
Chief, Division of Breast Imaging  
Northwell Health  
Assistant Professor of Radiology  
Hofstra-Northwell School of Medicine



Joseph P. Russo, MD  
Senior Chief, Mammography  
St. Luke's University Hospital System

---

# The Pursuit of Excellence in Breast Health: Challenges, Opportunities, and Successes

*Applied Radiology and Delphi Radiology Associates convened an Expert Forum, "The Pursuit of Excellence in Breast Health: Challenges, Opportunities and Successes," on July 29, 2016. The event was made possible by the financial support of GE Healthcare. Five breast imaging specialists discussed and debated various topics regarding the current state of breast health. The opinions shared are those of the author(s) and/or those of the panel participants, and are not necessarily those of GE Healthcare and Anderson Publishing, Ltd., publisher of Applied Radiology.*

Pursuing excellence in breast health is vitally important both for women seeking early breast cancer detection and for the radiologists who support them. As breast imaging technologies have become more advanced, radiologists have the ability to detect the smallest of malignancies at very early stages, so that now more than ever, women have a fighting chance against breast cancer.

The Expert Forum on the Pursuit of Excellence in Breast Health served as an opportunity for participating panelists to reflect on the current state of breast cancer in the U.S. and discuss some of the challenges they face, as well as the opportunities they see to improve diagnosis, treatment and outcomes. Breast cancer screening and individual risk assessment, communication and trends in advanced breast imaging technologies were at the very core of the rich clinical conversations among the imaging experts who were part of the forum held in Chicago.

The expert panel consisted of Nina S. Vincoff, MD, Chief, Division of Breast Imaging, Northwell Health; Erin I. Neuschler, MD, Assistant Professor of Radiology and Director of Clinical Research,

Department of Breast Imaging, Northwestern University Feinberg School of Medicine; Georgia G. Spear, Director of the Clinical Breast MRI Program, and Clinical Assistant Professor of Radiology in the Department of Breast Imaging, North-Shore University Health System; Joseph P. Russo, MD, Senior Chief, Mammography, St. Luke's University Hospital System; and William R. Poller, MD, FACR, Director, Division of Breast Imaging, Allegheny Health Network System.

## Screening and guidelines

The best chance women have against breast cancer is early diagnosis. To get there, screening is critical. Current statistics report that 66.8% of women over age 40 in the U.S. have had a mammogram within the past two years. Although screening has significantly reduced breast cancer since the 1980s, statistics demonstrate that the incidence and prevalence of breast cancer is still on the rise (Table 1).

Though it may seem obvious that patients should be screened earlier to prevent breast cancer, conflicting guidelines and information can serve to confuse patients and referring physicians

alike. The panel reviewed three different sets of guidelines wherein the age recommendations to begin screening for breast cancer were inconsistent. This sparked much discussion among the panelists. They all agreed that confusion about screening can delay or even deter women from coming in, and any delay in diagnosis puts them at increased risk, potentially exposing them to costly future surgeries, uncomfortable radiation therapy treatments, and expensive chemotherapy agents. Recommendations to start screening at an older age can have a negative effect on health outcomes when patients present with later-stage cancers that have already metastasized at presentation. In light of such possibilities, the panelists were in unanimous agreement that mammography screening practices need to be continuously reviewed in an effort to stay ahead in the fight.

In voicing support for the guidelines issued by the American College of Radiology (ACR), the panel members were critical of various conflicting recommendations issued by such organizations as the American Cancer Society and the United States Preventive Services Task Force.



**Table 1. Some recent statistics on breast cancer<sup>1</sup>**

- Recent American Cancer Society (ACS) figures suggest that one in eight women will be diagnosed with breast cancer in their lifetime and approximately 300,000 women will be diagnosed with invasive and non-invasive breast cancer in 2016.
- In *ACS Breast Cancer Facts and Figures, 2013-2014*, the ACS found that 79% of new cases and 88% of breast cancer deaths occurred in women aged 50 years and older.
- In an April 2015 article, "Study Forecasts New Breast Cancer Cases by 2030," The National Cancer Institute estimated that the number of breast cancers diagnosed in the U.S. will increase by about 50% by 2030.
- As outlined by the Advisory Board Company, *Women's Health Trends from July 2014*, the need to screen is increasing, as the number of women aged 40-50 increases 85% across the next decade

"This is only going to lead to delayed diagnosis," said Dr. Vincoff. "We have patients who have felt something in the breast, and they don't want to have a mammogram because they have read these guidelines, and they say, 'I don't need to have a mammogram until I'm 45.' I worry about these patients going forward. We are delaying diagnosis. By eliminating early detection, we've basically told patients that they should come in with a breast cancer that's more advanced, [that] may not be treatable, and may require more aggressive surgery or more aggressive treatment. It's upsetting.

Dr. Poller agreed, emphasizing that breast cancers will be discovered "much later and at more advanced stages" if the age of initial screening in patients is moved up from 40 years of age to 45 or 50 years of age. He reported that at his facility, women are presenting earlier and earlier in terms of age, reporting breast masses which often turn out to be cancers.

## Callbacks and patient anxiety

From the patients' perspective, the sooner they can get the results from their annual breast cancer screening, the sooner they can feel relieved. The

panel members all agreed that due to the high anxiety level of their patients, keeping recall rates down can only serve to reduce their uncertainty and sleepless nights.

As it stands, there is no shortage of fear and uncertainty among patients. On average, 10% of women will be recalled from each screening examination for further testing. Only five of the 100 women recalled will have cancer. Over the course of annual screenings for 10 years, 50% of women will experience a false positive. These statistics underscore the importance of accuracy and timely reporting of results to allay patient fears. The panelists agreed that keeping recall rates at or under the 10% national average is ideal, and notable discussion ensued surrounding the influences behind each panelist's actual and ideal rates, and how they strive to make that number even lower. The panel members shared their own efforts, goals and progress toward reducing recall rates and minimizing patient anxiety in their practices, from making improvements in workflow efficiency to decreasing the time to diagnosis; some offering same-day test results.

There are many factors, both clinical and operational, that can impact

the recall rate. The patient's age, breast density and cancer history make up some of the clinical factors; operationally, the availability of the patient's prior exams is key. The ability to remark subtle changes year over year can eliminate uncertainty and requests for additional imaging.

Dr. Vincoff explained the situation at her facility: "We are just not there right now," she said. "Our true recall rate is somewhere between 10 and 15%, depending on the office, and some of that variability actually depends on things like how accessible prior mammograms are, and that varies for us from office to office."

Dr. Spear also weighed in on the topic of keeping recall rates at or under the national average.

"Our institutional callback rate is less than 10%, and our radiologists are notified through an internal quality audit," Dr. Spear said. "We find out exactly where our callback rate lies, and then we know how to handle that appropriately. We are currently between 5 and 10%, with 13 radiologists that are dedicated breast imagers at our center, and we fall in that range."

Oftentimes, due to dense breasts, medical history or other clinical reasons, it may be best for some patients

## American College Of Radiology Breast Cancer Screening Guidelines 2016\*

- Age 40 is when annual screening mammography is recommended for the general population.
- Age 25-30 for BRCA Carriers and untested relatives of BRCA Carriers.
- Age 25-30 or 10 years earlier than the age of the affected relative at diagnosis, whichever is later, for women with a first-degree relative with premenopausal breast cancer.

\*Mainiero MB, Bailey L, D'Orsi C, et al. ACR Appropriateness Criteria® Breast Cancer Screening. Available at <https://acsearch.acr.org/docs/70910/Narrative/>. American College of Radiology. Accessed October 14, 2016.

to be paired with alternative or adjunct screening technology to obtain a better result. Sometimes that additional testing can be performed the same day, and other times, the patient will have to be called back in.

Dr. Vincoff suggested that awareness of recall rates is key. The panelists concurred and offered their own best practices on how frequently recall rates are reviewed in their practices and what sorts of in-house checks, or quality audits, are in place. Most practices are reviewing the rates quarterly or bi-annually. In addition to regular status updates on recall rates at each of their facilities, Dr. Neuschler said, a new program is being developed to allow each radiologist to log in and review cases that have been called back, offering real-time feedback and the opportunity to identify trends.

### Effective communication in breast health

As radiology practices become larger and more specialized, radiologists have discovered ways to communicate that are streamlined and more efficient, allowing for offline reading, automated reporting and automated patient-letter generation. More sophisticated and/or automated communication, however, can come at the expense of personal interaction with patients, referring physicians and medical colleagues.

The panelists discussed how critically important it is to maintain direct

communication with patients, as well as the colleagues who are a part of their integrated medical teams, including primary care physicians, surgeons, medical oncologists, radiation oncologists and breast pathologists.

Dr. Poller described what he calls “the huddle,” an opportunity for radiologists, mammography technologists and nurse navigators to come together at the beginning of the day to lay out a game plan, while Dr. Neuschler described her methods for individual, compassionate, and private counseling of breast care patients who will require a breast biopsy. In addition, Dr. Vincoff described the diligence of her practice in promptly sending mammography reports to referring clinicians (and lay letters to patients). The old-fashioned radiologist phone call to explain complicated findings was often an approach which Dr. Russo felt was useful, not only to report findings—but as a way to create a bridge of trust between the radiologists and the referring doctors.

### Proactive professional outreach

Regularly scheduled, face-to-face conferences or tumor board meetings designed to address challenging cases and unusual pathologies, it was discussed, are the surest way to demonstrate radiologists' value to clinical teams involved in breast imaging. Direct communication with clinicians

was believed to be especially critical; even something as basic as a phone call to a referring clinician or patient can make a significant difference, not just in conveying results with clarity, but also in building trust with colleagues as key members of the patient's health-care team.

“We are truly part of the team,” Dr. Vincoff said. “At our tumor board meetings, we're not there to just show cases, but to actually participate in the conversation regarding the best course of management for our patients.”

Dr. Russo explained that he and his fellow radiologists have been making it a priority to reach out to and develop strong relationships with referring physicians, including surgeons, OB/GYNs and internal medicine specialists.

“These referring physicians are extremely comfortable having the radiologists at their staff meetings,” Dr. Russo stated, noting that this gives his group an opportunity to communicate updates about new technology in the women's imaging department. Dr. Russo explained that his group's outreach efforts are bearing fruit; the group receives many calls each day, and questions often relate to MRI and ABUS cases, which can be complicated to read and understand.

Demonstrating radiologists' clinical value in the care team continues to be an important topic with respect to the future of radiology as a specialty and much effort has gone into communi-

cating the importance of getting out of the reading room. If radiologists don't do this, and instead drift into the background of medicine and clinical decision-making, Dr. Russo warned, they risk becoming a commodity.

## Vital patient communications

Direct communication with patients is another topic that sparked much discussion on the panel. All of the panelists are passionate about the need to communicate with patients directly and promptly, especially in breast imaging, where patient anxiety can be very high.

Dr. Neuschler emphasized the importance of communication at critical moments in patient care. When recommending a biopsy, for example, Dr. Neuschler said she brings the patient into her private reading room to review the imaging findings if she is not already in a private ultrasound room with a PACS station. She stressed the need for such an environment to make certain that patients understand the reason for the biopsy. "The patient, in turn, has my complete attention and has time to ask me any questions regarding the imaging," she added.

In some practices, certain patient communications are entrusted to a specially appointed nursing staff. "If a patient has a biopsy," Dr. Poller explained, "there's a nurse navigator in the room, so it's communicated to the patient at that time that the nurse navigator will call the patient with the results. They know that a nurse is going to call them and they embrace it."

Dr. Vincoff expressed her belief that a "direct result" of better clinician relationships and communication is that her practice's referral base entrusts certain patient communications to her team.

## Technology in breast cancer detection

New technology is revolutionizing breast imaging. From enhancing the standard screening mammography with 3D images to automated breast ultrasound (ABUS) and breast MRI, there is hardly a limit to the radiologists' resources enabling earlier detection of breast cancers. As clinicians gather more and better evidence of how effective these technologies are, they are consistently reevaluating their methods in an effort to provide a more personalized approach to breast cancer screening, based on patients' individual risk factors.

Specific success cases the panel discussed were attributed to DBT and ABUS, which have made the diagnosis of breast cancer more rapid and certain, with the desirable benefit of less frequent patient recalls. Less frequent callbacks resulted not only in patient convenience, the panel concurred, but cost savings. Dr. Russo was a staunch advocate of DBT, as was Dr. Vincoff, who was pleased to report that her facility was at "100% tomosynthesis," with great outcomes.

All the panel members agreed that if a lesion is seen with ultrasound, this modality is also the easiest way to get a "fast and accurate" biopsy of a breast lesion. Indeed, ABUS was described as a "godsend" for women with dense breast parenchyma and potential "hidden cancers."

Each panel member approaches screening on an individualized basis, via a combination of risk, personal health history and family history of breast cancer. There are times, they said, when utilizing alternative screening exams just makes the most sense. The expert panel discussed the complexities surrounding

the development of common utilization guidelines for when it may be best to use ABUS and MRI, especially for dense breast tissue or diagnostically, for high-risk cases, respectively. Overall, there has been a marked increase in the use of ABUS for breast screening as an adjunct or alternate screening tool, depending on patient history or need, and some patients are simply requesting it because it does not produce ionizing radiation.

## The battle rages on

At the conclusion of the forum, the panelists left feeling very enthusiastic about the honest conversations and debates in which they had engaged; they concurred that as radiologists and breast imaging experts they must leverage available technology to suit patients' individual risk profiles and employ best practices with rigor.

The panelists shared the same sentiment with regard to their collective role in the early detection of breast cancer. It can be condensed down to the credo that all breast radiologists, true soldiers in the fight against breast cancer, live by: "Let's diagnose breast cancer — early!"

## REFERENCES

1. No health insurance coverage among persons under age 65, by age and race and Hispanic origin: United States, 1999–June 2015 (preliminary data). Available at <http://www.cdc.gov/nchs/data/abus/hus15.pdf#070>. Accessed October 18, 2016.
2. Rosenberg RD, Yankaskas BC, Abraham LA, et al.: Performance benchmarks for screening mammography. *Radiology*. 241 (1): 55-66, 2006. [PUBMED Abstract]
3. Elmore JC, Barton MB, Moceri VM, et al.: Ten-year risk of false positive screening mammograms and clinical breast examinations. *N Engl J Med*. 338 (16): 1089-96, 1998. [PUBMED Abstract]



# Do you have the information needed to enhance clinical outcomes with personalized care?


## The GE Breast Health Advantage can help.

Helping your patients achieve positive clinical outcomes starts with gaining a clear image of the breast to identify any potential abnormalities. And if one presents, you want to rule-in or rule-out cancer quickly and gain the insights needed to inform treatment. It's important to have the right mix of technologies, services and support so that you can adapt to the needs of your patients.

In today's environment, it's important to ensure that you have a trusted, committed team to help you deliver the care your patients need and to help you meet your operational and financial objectives.

We'd like to help. To learn more about the GE Breast Health Advantage and our adaptable portfolio of products, services and insights to help you care for every woman, every body, contact your GE sales representative or visit [gehealthcare.com/breasthealth](http://gehealthcare.com/breasthealth).

## Breast Health Programs Challenges & Opportunities

-  Managing Evolving Care Pathways
-  Adapting to Shifting Reimbursement
-  Optimizing Capital & Operating Budgets
-  Competing for Patients & Physicians
-  Improving Treatment Appropriateness & Clinical Outcomes
-  Optimizing Operational Workflows & Assets
-  Reducing Recall Rates
-  Shortening Time-to-Diagnosis
-  Evaluating and Cost Efficiently Integrating New Technologies

