SCREENING PRACTICES AROUND THE GLOBE:
Evaluating the Standards and Raising the Questions

This year's Global Exchange sets the stage for a worthy discussion on radiology practices around the world.

A curious phenomenon occurred at this year's Global Exchange: the potent topic "Radiology Screening Practices" generated more questions than answers during this thoughtful and jovial roundtable discussion with members of ARRS and the Japan Radiological Society (JRS). The experts who contributed to this panel discussion included, from ARRS, Dr. Charles E. Kahn, Jr., Dr. Ruth Carlos, Dr. Ella Kazerooni, Dr. Joseph K.T. Lee, Dr. Perry Pickhardt, and Dr. Bernard King; and from JRS, Dr. Sachio Kuribayashi, Dr. Shigeru Ehara, Dr. Keiko Kuriyama, Dr. Yasuyuki Kurihara, and Dr. Yasuo Nakajima. The exchange created a space for open and practical dialogue and allowed the panelists to take on some of the most hot-button challenges facing radiologists around the world today: Who sets the standards for best practices? How can we encourage preventive screenings in a tight economy? Who should bear the financial burden for additional screenings?

Let's take a look at how these global leaders tackled the issues and raised additional questions for everyone to consider.

With one full-body test, we can do a lot of screening. We can screen for aneurysms, cancer outside of the colon, and osteoporosis. We have to do more to turn that whole argument [against full-body screening] around to a positive.

— Bernard King, MD

Who Sets the Standards for Best Practices?

This intriguing discussion began with examining how professionals in each country are using CT colonography (CTC). Now that the Japanese government has approved payments for CTC and has offered higher reimbursements, Dr. Sachio Kuribayashi, the president of the JRS and professor and chairman of radiology at Keio University School of Medicine, confirms that more training courses are being offered for radiologists. He says, "JRS has supported a training course during our spring meeting, and several other screening training sessions are set up throughout the year." Dr. Kuribayashi also hopes that CTC will eventually become a specialization for radiologists in Japan.

Dr. Keiko Kuriyama, a chest radiologist and manager of the department of radiology from the Osaka National Hospital, reported that Japan's increased focus on cancer screening is also fueling the need for more CTC training for radiologists. She says, "Cancer screening is big in Japan, so they are eager to financially support [these types of screenings] based on the Cancer Control Act. But the challenge is how many people can really do CTC well."

Although skill and implementation of CTC are also important issues in the United States, Dr. Perry Pickhardt, professor of radiology in the abdominal imaging section at the University of Wisconsin School of Medicine & Public Health, notes that helping radiologists focus on quality over quantity remains a challenge. In the United States, he says, "Many radiologists are very fast and skillful at a variety of different procedures. Essentially, the more studies you read, the more money you make. Unfortunately, some sectors are more focused on volume."

Dr. Joseph K.T. Lee, former ARRS president and J.H. Scatliff Distinguished Professor of Radiology and immediate past chair of the department of radiology at the University of North Carolina at Chapel Hill, points out that reimbursement for CTC is also a challenge in the United States. He says, "Most of the scientific and cost-effectiveness issues with CTC have been solved here, but there is still no reimbursement from the largest employer, the U.S. government, which has actually impeded the dissemination of CTC." An additional hurdle for radiologists in the United States is deciding when and on which patients to use CTC. Dr. Charles E. Kahn, Jr., current ARRS president and professor of radiology at the Medical College of Wisconsin, asserts, "In the U.S., one of the arguments is to try to recruit gastroenterologists to do more CTCs. They could make more money doing polypectomies and using CTCs to do the screenings."

Although this could be a viable solution, Dr. Bernard King, ARRS secretary-treasurer, professor, and chair of the department of radiology at the Mayo Clinic, argues that it is still challenging. He says, "Gastroenterologists will argue that it is more cost effective to perform a diagnostic colonoscopy with the ability to remove any polyps discovered at the same setting, thus avoiding any subsequent procedures and costs. Our imaging community will need to provide cost-effectiveness studies to prove the advantage of screening with CTC with subsequent therapeutic colonoscopies if needed."

JRS representatives share their expertise.

How Do We Encourage the Benefits of Preventive and Routine Screenings?

The next question this panel tackled was how to extol the benefits of preventive screening procedures for patients. Dr. Ruth Carlos, professor of radiology and assistant chair of clinical research from the University of Michigan, argues that, with

the decline in the worldwide economy, it is often an uphill battle to reaffirm the positives for having these screenings done. She shares, "Before the economy burst, couples could ask themselves, 'Should we go to Florida this year or get his-and-hers full-body scans?' Now that many people have fallen on hard economic times, these screenings are seen as a disposable service." She also believes that there should be a differentiation between full-body scans and other preventive services that have evidence of decreasing mortality. Dr. Kahn notes, "While these tests might detect some cancers, many felt that these tests were scientifically and ethically questionable. As businesses, most of these full-body screening services have closed."

Focus group participants exchange ideas.

As full-body scans decrease in the United States, these screenings are gaining traction in Japan. Dr. Kuriyama notes, "The patients love the free services and the free coupons. Free examination coupons for major cancer screenings are subsidized by the Japanese government. For example, barium studies for gastric cancers, stool occult blood tests for colorectal cancers, plain chest radiographs for lung cancers in men and women, mammography for breast cancers, and cytology for cervical cancers in women are basic examinations as cancer control measures."

Dr. Shigeru Ehara, professor and chairman, department of radiology at the Iwate Medical University School of Medicine, also shares, "In Japan, we have subsidized screening programs. Some local governments also issue vouchers for some screening tests." Even though free screenings have decreased cancer rates in Japan, the new challenge is providing a reasonable cutoff for free screenings in light of Japan's growing and aging population. Dr. Yasuo Nakajima, professor and chairman, department of radiology at the St. Marianna University School of Medicine, says, "We have a large population of people over 80 and 90 years old in our country. In the next year, we will be implementing 50,000 additional ultrasounds for more women over the age of 40. We have to find a reasonable age limitation for [free] screenings."

ARRS GLOBAL PARTNER SOCIETY PROGRAM
Around the World

The mission of the ARRS Global Partner Society (GPS) Program is to build long-standing relationships with key leaders and societies in the global imaging community.

Global Partner Societies

The ARRS has established global partnerships with the following international radiology societies.

- Korean Society of Radiology (KSR)
- Spanish Society of Medical Radiology (SERAM)
- Japan Radiological Society (JRS)
- Italian Society of Medical Radiology (SIRM)
- Radiological Society of South Africa (RSSA)

Cancer screening is big in Japan, so they are eager to financially support [CTC screenings] based on the Cancer Control Act. But the challenge is how many people can really do CTC well.

— Keiko Kuriyama, MD

We have a large population of people over 80 and 90 years old in our country. In the next year, we will be implementing 50,000 additional ultrasounds for more women over the age of 40. We have to find a reasonable age limitation for [free] screenings.

— Yasuo Nakajima, MD

This impending stress upon the Japanese medical system is already starting to show signs of strain. Dr. Ehara observes, "The Japanese government is getting serious about looking into how to cut some of these screening programs. They used to be so generous, but now they are requiring patients to pay for some of these tests."

Back in the United States, Dr. King believes that the radiology community must do more to affirm the positives of implementing these screenings. He says, "With one full-body test, we can do a lot of screening. We can screen for aneurysms, cancer outside of the colon, and osteoporosis. We have to do more to turn that whole argument around to a positive."

What's Next on the Horizon?

Experts from both countries agreed that determining how to set appropriate standards with primary care physicians, medical associations, and local governments is the next big issue that everyone is facing. "In Japan, the central government sets the general guidelines and policies for health care," says Dr. Ehara. "But the implementation of the guidelines is done by the local governments with some variations in each location." Dr. Ehara also reports that the Japanese Medical Association is primarily controlled by primary care physicians who wield a lot of influence on how funds and guidelines are set in many areas.

Dr. Ella Kazerooni, former ARRS president, cardiothoracic radiologist, professor, and associate chair for clinical affairs from the University of Michigan, points out that a uniform implementation of standards is equally daunting in the United States. She adds, "With CT, for example, the usage can be very heterogeneous, depending upon the state and the region. There was a movement a few years back by the Center for Medicare and Medicaid Services (CMS) to prevent national coverage of cardiac CT. Fortunately, efforts from professional organizations like the American College of Radiology and the American College of Cardiology helped to prevent that from happening."

Radiologists in the United States are also currently part of the discussion about creating a national standard for lung cancer screening using CT. Dr. Kazerooni says, "We may be moving toward a national standard for lung cancer CT screening that is similar to the Mammography Quality Standard Act (MQSA) for breast cancer screening. This could mean that we will face the possibility of lower reimbursement per case and higher overhead costs when delivering these services."

Dr. Kuriyama revealed that Japanese radiologists are taking note of these developments in the United States and other European countries. She shares, "These standards have a very strong influence in Japan. We believe that CT screenings will be free and fully supported by the government in accordance with the Third Term Comprehensive 10-Year Cancer Control Strategy."

Conclusion

Ultimately, the panel concurred that regular screenings were beneficial for both patients and their families. Dr. Carlos asserts, "Many screening services serve as a gateway to help get people into the hospital system. For example, mammograms often serve as a way to get the entire family to come in for services." Dr. Kuriyama concurs, adding, "With the high prevalence of lung adenocarcinoma among East Asian women, when radiologists use CT during these evaluations, this is a good opportunity for evaluating all of their risk factors and helping them understand the benefits of regular screening."

As these screening practices and protocols continue to evolve, radiologists are both hopeful and cautious about how these screening standards will affect national and local health care protocols, additional fees and reimbursements, and ultimately patient care. Dr. Kazerooni concludes, "All of these screenings have political, societal, and individual implications. We have to learn to siphon out the beneficial components and focus on what's best for patient care." ■