An Exciting Time for Nuclear Medicine and Molecular Imaging

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My year as president of SNMMI is coming to a close, and what an amazing year it has been! In 2016, the U.S. Food and Drug Administration approved 2 new radiotracers, and more are in the pipeline. The Cancer Moonshot provides additional funding for research, and the nuclear medicine and molecular imaging field is at the forefront of precision medicine development.

Of course, we also face challenges. With the health care system moving from volume-based to value-driven practice, we now need to demonstrate more clearly the quality and value of our field to all stakeholders, from referring physicians and patients to legislators and regulators. That is where SNMMI’s new Value Initiative comes in. It addresses 5 critical domains that will guide the society’s strategic plan over the next several years: Quality of Practice, Research and Development, Workforce Pipeline and Lifet ime Education, Advocacy, and Outreach. The Value Initiative will be launched at the SNMMI Annual Meeting in Denver, CO, and will help ensure our field a vibrant, innovative future in this new era of patient care.

The work of strengthening training pathways, which began under the leadership of Hossein Jadvar, MD, PhD, MPH, MBA, FSNMMI, has continued to be a priority and is included in the Value Initiative’s focus on education and the workforce pipeline. On the radiopharmaceutical side, SNMMI’s new Quality Systems Personnel Training Program will cross-train nuclear pharmacists and radiochemists in elements of both pharmacy and chemistry to ensure the accurate manufacture and release of radiopharmaceuticals.

The delivery of high-quality, value-driven clinical nuclear medicine practice is our goal. When I began my year as president, SNMMI’s Evidence and Quality Department had already set up multidisciplinary workgroups to develop evidence-based appropriate use criteria (AUC) for a number of diagnostic imaging services, and the society was committed to establishing a comprehensive library of AUC for the most common nuclear medicine procedures. Since then, SNMMI has become a qualified provider-led entity under the Medicare Appropriate Use Criteria Program for advanced diagnostic imaging. Two new AUC (Bone Scintigraphy in Prostate and Breast Cancer and Ventilation/Perfusion Imaging in Pulmonary Embolism) were published in just the last 2 months, and 8 more are under development. This is important because, beginning January 1, 2018, Centers for Medicare & Medicaid Services reimbursement will rely heavily on referencing the AUC for medical imaging procedures.

Concerns about the supply of $^{99}$Mo and its daughter, $^{99m}$Tc, have been reported often in the news. Although the cessation of production at the National Research Universal reactor in Canada after October 2016 caused initial fear of a shortage, a number of positive developments have now assuaged that worry. Early on, a study by the Organisation for Economic Co-operation and Development’s Nuclear Energy Agency stated that the supply chain capacity should be sufficient to manage an unplanned outage of a reactor or a processor through to 2021. The High Flux Reactor in Petten, The Netherlands, has undergone upgrades, and has significantly increased production of $^{99}$Mo, and the Australian Nuclear Science and Technology Organisation has ramped up $^{99}$Mo production at its Open Pool Australian Lightwater reactor. Companies working in partnership with the U.S. Department of Energy National Nuclear Security Administration on non–high energy uranium production of $^{99}$Mo will also soon be part of the supply chain.

In short, we have reason for optimism on many fronts. On a personal level, this has been a very rewarding and productive year. I have been introduced to new opportunities and met new people who have broadened my view of nuclear medicine. It has also been very important for me to assist in improving the profile of women in nuclear medicine and to see more women taking on leadership roles. Coming from the radiopharmaceutical side of the field, I have had the opportunity to learn more about physician needs as well.

Throughout my presidency, I relied on the support, advice, and work of so many individuals and groups within the society. I send a heartfelt “thank you” to the leadership team, centers of excellence, council and committee members, staff, and countless volunteers who dedicated their time and expertise over the past year!

With theranostics becoming a major tool for delivering precision medical treatment, our field is poised to take a leadership role in the health care of tomorrow. As I turn the presidency over to Ben Greenspan, MD, the future of molecular imaging and nuclear medicine is indeed bright!