

Advancing Nuclear Medicine and Molecular Imaging through Strategic Partnerships

Last year, SNM concluded its Bench to Bedside campaign, a 5-year initiative dedicated to positioning molecular imaging and therapy as an essential tool in patient care. The multifaceted campaign focused on 5 primary areas: raising awareness of molecular imaging, advocating for molecular imaging and therapy, educating and promoting collaboration with referring physicians and patient groups, training and educating the current and future workforces, and supporting innovations in translational research. Molecular imaging is now fully integrated into SNM and its initiatives. Going forward, SNM has identified 4 areas that are critical to advancing the field—new radiopharmaceuticals, radioisotope therapy, new technologies, and value.

Several new radiopharmaceuticals are in clinical trials. One of the most promising groups of radiopharmaceuticals is the beta amyloid agents. The U.S. Food and Drug Administration (FDA) has just approved the first agent. SNM has undertaken several activities to ensure the appropriate use of these agents in patients with suspected Alzheimer disease. We are working with the Alzheimer's Association to develop appropriate use criteria and with the European Association of Nuclear Medicine on procedure guidelines. SNM is also developing education for referring physicians and imaging physicians through live meetings, webinars, Web site development, and printed material. The SNM Center for Molecular Imaging Innovation and Translation also organized a very well attended and successful 1-day workshop on beta amyloid imaging at the SNM 2012 Mid-Winter Meeting in Orlando, FL.

Radioisotope therapy has been very important in the management of patients with thyroid disease and lymphoma, as well as bone and liver metastases from a variety of cancers. Several new radioisotope therapies are being tested in clinical trials with promising results. One of the most promising agents is a radioisotope that targets bone metastases from prostate cancer and has been shown to improve patient survival. SNM has sent letters to the FDA in support of approval, and to the Centers for Medicare & Medicaid Services to lay the groundwork for reimbursement. SNM also has a plan to educate private payers about the therapy so that it may be covered by their groups as well. Once the therapy is approved, SNM will work with various patient advocacy groups, including the Men's Health Network, to educate patients about the availability of the new therapy. SNM will also reach out to referring physicians to educate them about appropriate use.

SNM is preparing for the adoption of new molecular imaging technologies in clinical practice. Three PET/MR imaging systems are FDA approved. To prepare our membership, SNM has started MR case review workshops at the

Annual and Mid-Winter Meetings patterned on the very successful CT case review workshops. SNM also recognizes that optical imaging has become an important molecular imaging research tool poised on the threshold of clinical application. SNM has created a robust online resource for optical imaging, available at www.snm.org/cmiit, with research, review papers, and presentations. SNM's 2012 Annual Meeting will offer courses on photoacoustics, multi-

spectral optoacoustic tomography, Cerenkov imaging intra-operative surgery, and more. We have met with the Optical Society of America to share the latest advances in optical imaging and have provided a newsletter article on optical imaging for the Commission on Cancer. As a result of this work, SNM has increased its non-nuclear-focused membership, which will help further integrate these modalities into the society.

SNM recognizes that it is essential to demonstrate the value of nuclear medicine and molecular imaging in terms of incremental benefits to patients. Without this information, payers will not reimburse for new diagnostic and therapeutic radiopharmaceuticals or for new molecular imaging technologies. Comparative effectiveness research is one way to demonstrate value. In 2010, SNM organized a comparative effectiveness research workshop funded by the Agency for Healthcare Research and Quality. This year, SNM is working with the Center for Medical Technology Policy on a multidisciplinary stakeholder workshop to design comparative effectiveness studies for FDG PET/CT in patients with head and neck cancer that will serve as a model for similar efforts in other applications. Evidence-based appropriate use criteria make up another area in which SNM is very active. Efforts are also underway to disseminate current knowledge on comparative effectiveness and appropriate use so that patients have access to the most appropriate care.

SNM is working to improve human health by advancing molecular imaging and therapy. We have reached out to others to form strategic partnerships to promote new radiopharmaceuticals, radioisotope therapy, and new technologies, as well as demonstrate their value. We believe that partnerships that leverage the strengths of SNM and other organizations are the best way to succeed.



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