

SNMMI Leadership Presentation

Bennett S. Greenspan, MD, MS, FACNM, FACR
SNMMI President-Elect
Mid-Eastern Chapter, SNMMI
Dover, Delaware
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SNMMI's History

- Founded in 1954
- The largest international scientific organization dedicated to nuclear medicine and radionuclide therapy
- A multidisciplinary organization
 - More than 15,000 physicians, scientists, pharmacists and technologists
 - Industry partners interested in the diagnostic, therapeutic and investigational uses of molecular imaging and therapy agents, instrumentation and techniques



SNMMI Leadership



Sally W. Schwarz, MS,
RPh, BCNP
President



Bennett S. Greenspan,
MD, FACNM, FACR
President-Elect



Satoshi Minoshima, MD, PhD
Vice President-Elect

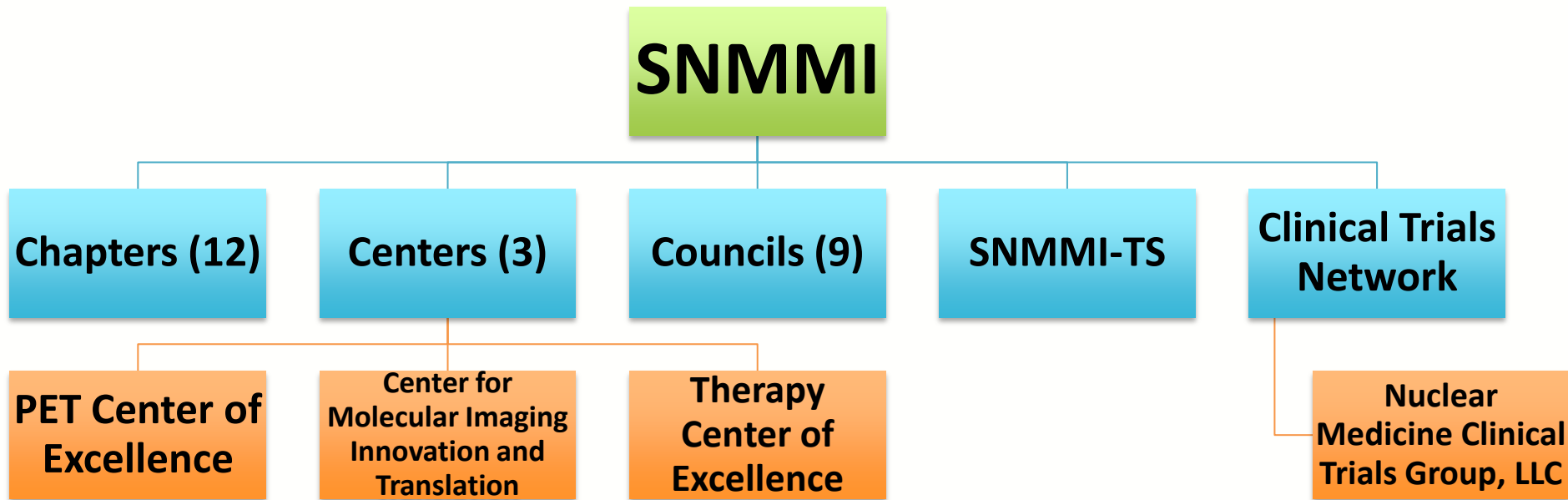


Sara G. Johnson, MBA,
CNMT, NCT, FSNMMI-TS
SNMMI-TS President



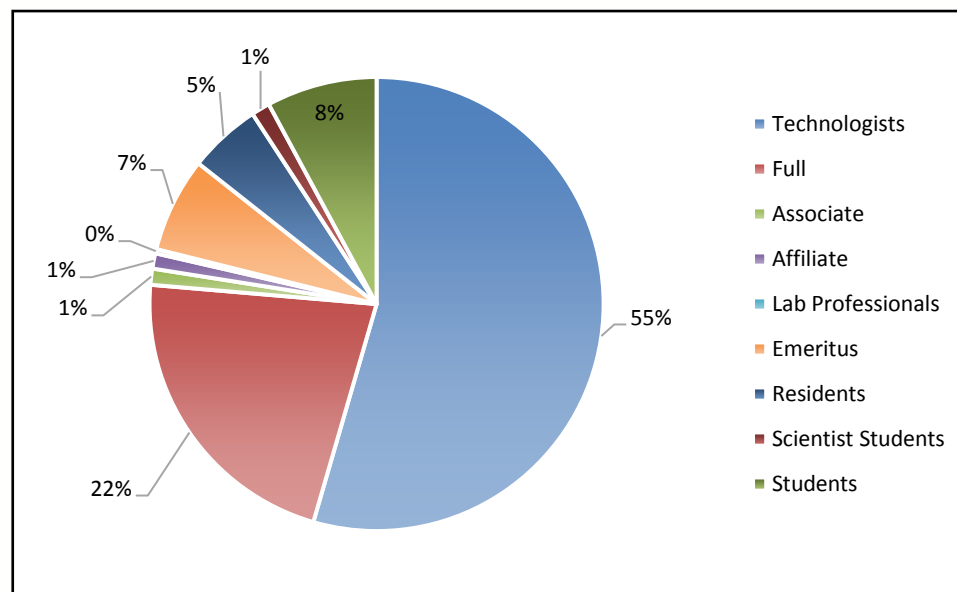
Kathleen M. Krisak, BS,
CNMT, FSNMMI-TS
SNMMI-TS President-Elect

Organizational Structure



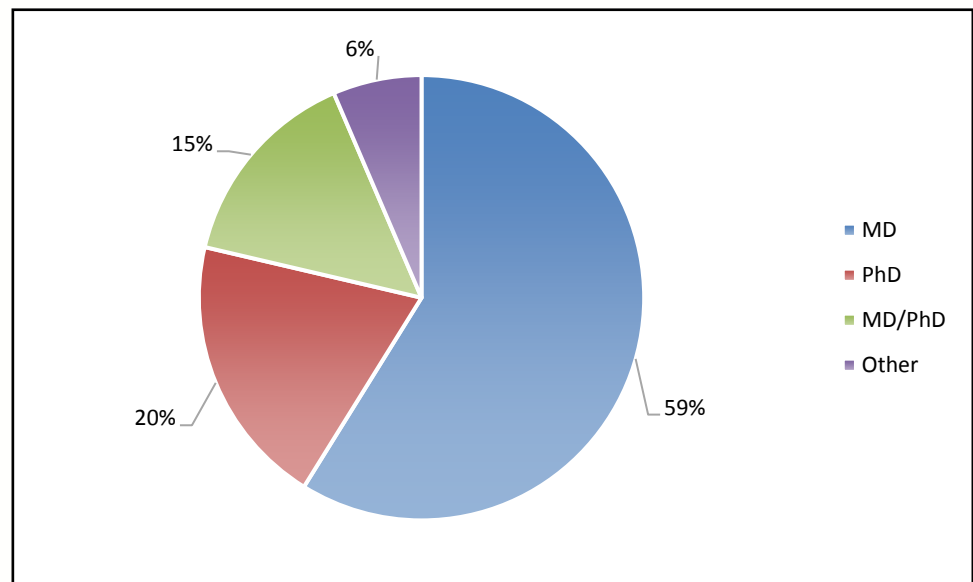
Membership Summary – 2016

Member Types	Count
Technologists	8,235
Full	3,303
Associate	173
Affiliate	165
Lab Professionals	46
Emeritus	1,019
Residents	780
Scientist Students	200
Students	1,190
Total	15,111



Membership Summary – 2016

Full Members by Designation	Count
MD	1,944
PhD	654
MD/PhD	492
Other	213
Total	3,303



SNMMI Strategic Plan – Approved June 2013

- Goal A:** Advance the development and approval of nuclear medicine and molecular imaging technologies.
- Goal B:** Facilitate and support the availability and clinical utilization of nuclear medicine and molecular imaging technologies.
- Goal C:** Increase appropriate utilization of radionuclide therapy.
- Goal D:** Advance and promote quality, value and safety of molecular imaging and nuclear medicine.
- Goal E:** Support and enhance the professional workforce and environment.

Goal A

Advance the development and approval of
nuclear medicine and molecular imaging
technologies

SNMMI FDA Task Force

Mission:

To create a more efficient and timely FDA approval process for new and non-proprietary radiotracers and radiotherapeutics

Strategic Plan:

- Optimize evidentiary requirements for the approval of new radiotracers and radiotherapeutics
- Engage FDA in dialogue on our recommendations to improve approval process
- Improve clinical access and reimbursement for non-approved agents under development (traditional IND) or under an expanded access IND

Recent Activities:

- The Task Force met with FDA staff at the SNMMI Annual Meeting in San Diego to continue the discussions held last December. The discussion centered on ways in which evidence might be harmonized for approvals at FDA with coverage decisions at CMS.
- The Task Force is planning a stakeholder meeting in the spring of 2017 to include FDA, CMS, NRC, medical societies and industry partners to discuss evidence and approval and coverage pathways
- Fluciclovine F-18 (Axumin®), was approved in May 2016 by the FDA for PET imaging in men with suspected recurrent prostate cancer based on PSA following prior treatment.
- Ga-68 DOTATATE (NETSPOT®) was approved in June 2016 for PET imaging of somatostatin receptor-positive neuroendocrine tumors in adult and pediatric patients.

Increased Translation of New Technologies and Agents

Translation and Preclinical Imaging Workshops

- 3rd AACR-SNMMI Joint Conference on “*State-of-the-Art Molecular Imaging in Cancer Biology and Therapy*,” is being planned for February 2018, in San Diego, CA.
- 3rd *Theranostic World Congress on Ga-68 and PRRT*, held on March 12-14, 2015, at Johns Hopkins University in Baltimore; a jointly sponsored meeting focusing on imaging with Ga-68 and theranostic agents.
- “First-in-Human” continuing education session took place on January 28, 2016, at the Mid-Winter Meeting.
- Sessions at the 2016 Annual Meeting included “Theranostic Nanoparticles,” “New First-in-Human Optical Tracers,” “PET/MR I: Technical Advances,” “PET/MR II: Clinical Applications,” and “Molecular Imaging of Infection and Inflammation.”

Education: New Learning Tools

Two molecular imaging books in production

- Molecular Imaging: An Introduction
 - *Michael Graham, Hossein Jadvar, Heather Jacene*
- Essentials of Molecular Imaging
 - *Carolyn Anderson; Jonathan McConathy, Jeffrey Norenberg, Todd Peterson, Henry VanBrocklin*

Translational research curriculum

- To enable the MI scientist to achieve competency in the skills needed to translate MI technologies to the clinic
- Prepared by CMIIT

Preclinical imaging

- Guidance for Methods Descriptions Used in Preclinical Imaging. *Molecular Imaging* 2013;12:409–423.



SOCIETY OF
NUCLEAR MEDICINE
AND MOLECULAR IMAGING

SNMMI Clinical Trials Network (CTN)

Vision

The CTN will take a leadership role in advancing the use of molecular imaging and radiotherapeutic agents, optimizing their use in clinical trials for translation and dissemination into clinical practice.

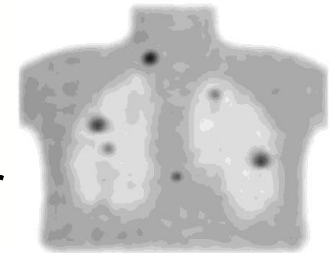
Mission

Facilitate the effective use of molecular imaging in clinical trials through standardization, coordination, and education for drug development and regulatory approval.

Clinical Trials Network

Ensure standardized, quality PET imaging in clinical trials for drug development and of new radiotracers

- Scanner Validation Program – oncology chest phantom has validated more than 270 scanners on four continents
- Assisted with 9 industry-sponsored trials
 - Using FDG, FLT, FDHT, F-choline and 2 proprietary agents
- Co-sponsored a workshop with NCI titled ‘Immune Modulation Therapy and Imaging’ to identify ways to image response to therapy for immuno-oncology agents
- Developed reader training for two new agents:
 - F18 Fluciclovine (Axumin®) for Blue Earth Diagnostics
 - Ga68 DOTATATE (NETSPOT®) for AAA



Clinical Trials Network

Facilitate access to investigational PET radiotracers for multicenter clinical trials

- Obtained a centralized IND for ^{18}F -FLT (cellular proliferation in tumors)
- Database of radiopharmaceuticals
- Recipient of Movember GAP2 funding grant for prostate cancer imaging
 - Managing international trials utilizing ^{18}F -choline and ^{18}F -FDHT

Gallium-68 Labeled Radiotracers

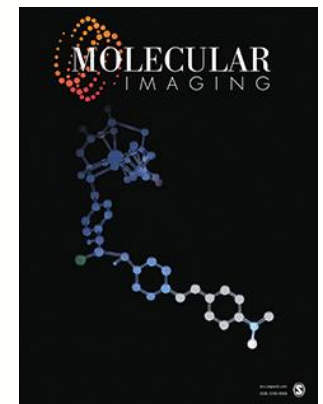
- The CTN Gallium Users Group was the first to receive Orphan Drug designation for a Ga-68-labeled somatostatin receptor agent.
- Users group members met with FDA officials to discuss the approval pathway for the manufactured Ga-68-labeled drugs, kit-based drugs, and generators.
- SNMMI/CTN co-sponsored the 3rd Theranostic World Congress on Ga-68 and PRRT in March 2015.
- These activities have contributed to the rapid regulatory advancement of these agents within FDA.
- CTN is now organizing Ga-68-PSMA trials for primary and biochemical recurrent prostate cancer imaging.

Industry Forum (SNMMI, MITA, CORAR)

- The Industry Forum identified areas of priority for unified and continuous work
 - Education and training
 - Government reimbursement reform
 - Evidence development
- The governing leadership of the Industry Forum decided to continue this work on an ad hoc basis with no formal governing structure
- The Reimbursement Reform Committee continues meeting on a regular basis and is working on a large survey to collect data to be presented to CMS and Capitol Hill to demonstrate patient access issues due to hospital outpatient reimbursement policies

SNMMI Journals

- The Journal of Nuclear Medicine
 - Strong influence through review and dissemination of novel nuclear medicine and molecular imaging research
 - Highest-impact nuclear medicine journal in the world; fourth highest of all medical imaging journals worldwide
 - Close to 2,000 original research papers submitted in 2015
 - Two most recent supplements downloaded ~ 40,000 times
 - Prostate cancer supplement will publish in fall 2016; Theranostics supplement planned for January 2017
- Journal of Nuclear Medicine Technology
 - Focus entirely on the technology crucial to nuclear medicine
 - More than 40 peer-reviewed articles per year
- Molecular Imaging
 - An official journal of the SNMMI, now published by SAGE
 - Basic and translational studies – novel results and concepts



Goal B

Facilitate and support the availability and clinical utilization of nuclear medicine and molecular imaging technologies

Mo-99 Shortages Possible in 2016-2018

- The U.S. consumes approximately one-half of the world's Mo-99 but has no domestic supply
 - Primary sources of Moly include Canada
 - The Canadian facility will cease commercial isotope production in October, 2016 (on emergency stand-by until 2018)
- S. 99 – American Medical Isotopes Production Act of 2011
 - SNMMI supported approval
 - Requires industry to convert from highly enriched uranium (HEU) to non-HEU by 2020
 - Addressed technology and waste disposal issues that were obstacles to developing new Mo-99 production facilities.

Mo-99 Supply – SNMMI Advocacy

- On September 12, 2016, The National Academy of Sciences released its long awaited report on *Molybdenum-99 for Medical Imaging*. The Report found that there is a greater than 50% chance of a severe shortage in the next couple of years. Today, the manufacturers and reactor owners are in a much better position to manage any shortages.
- Submitted comments to the OECD on the Security of Supply of Medical Radioisotopes and presented to the high-level working group (HLG-MR) in Paris.
- Continued participation in the White House working group on Mo-99 supply, which meets quarterly with OSTP, NNSA, FDA, CMS, and NRC. SNMMI presented at multiple meetings.
- SNMMI members and patient advocates met with more than 100 Congressional offices this year to advocate for a domestic source of Mo-99.

Ensure Adequate and Appropriate Reimbursement

Ambulatory Payment Classification Remodeling Task Force

- Created June 2013 at SNMMI Annual Meeting.
- Goal: Establish appropriate HOPPS reimbursement for indicated diagnostic nuclear medicine imaging services.
- Task force is currently working with CORAR and MITA and has held conference calls with other societies throughout 2014-2016.
 - Working on a solution to the bad data used in Medicare outpatient reimbursement decisions.
 - Meeting with CMS in the first quarter of 2015 did not change the CMS system of packaging nuclear medicine in HOPPS.
 - 24 Members of Congress sent a letter to CMS urging them to review the current reimbursement structure for nuclear medicine.
 - Task force now developing survey data to convince Congress to engage.

Ensure Adequate and Appropriate Reimbursement

- On March 31, 2014, Congress passed the “Protecting Access to Medicare Act of 2014” (H.R. 4302).
- Tied advanced diagnostics imaging services/physician reimbursement to appropriate use criteria (AUC).
 - Advanced diagnostic imaging services (ADIS) are defined as diagnostic MRI, CT, nuclear medicine (including PET), and other diagnostic imaging services specified by the Secretary in consultation with physician specialty organizations and other stakeholders.

PAMA - Protecting Access to Medicare Act of 2014 (HR 4302)

- PAMA Legislation:
 - Directed the Secretary of HHS to launch (originally by 2017) a program that encourages the use of appropriate use criteria for Advanced Diagnostic Imaging Services (ADIS).
 - Due to delays in implementation of this program, the earliest launch date expected to be 2018
 - Ordering professionals **will have to consult AUCs via a clinical decision support tool prior to ordering ADIS** to determine whether an exam is clinically appropriate for a patient's condition.

Protecting Access to Medicare Act of 2014 (HR 4302)

- AUCs can be created or endorsed only by approved or qualified **provider-led entities** (PLE) designated by CMS
- In June 2016, **SNMMI was approved** by Centers for Medicare and Medicaid Services (CMS) **as a qualified 'Provider-led Entity' (PLE)** that can develop and/or endorse Appropriate Use Criteria (AUC)
- SNMMI is one of the only 3 specialty societies that was approved as a PLE, along with ACR and ACC
- Overall 11 entities nationwide were approved at qualified PLEs

Medicare Access and CHIP Reauthorization Act of 2015 (MACRA)

- Repeals the sustainable growth rate (SGR) and establishes an alternative set of annual updates
- Signed into law April 2015
- Introduces a new merit-based incentive payment system (MIPS) and puts in place processes for developing, evaluating, and adopting alternative payment models
- Consolidates three existing quality reporting programs, plus adds a new program, into a single system through MIPS
 - Physician Quality Reporting System (PQRS)
 - Value-based Payment Modifier (VBPM)
 - Meaningful Use (MU)
 - Clinical practice improvement activities (CPIA)

SNMMI Outreach Program – Creating Partnerships with Patient Groups and Referring Physicians

Goals:

- Educate patient advocacy groups about the current value and future promise of molecular imaging and prepare them to be powerful allies in maintaining and expanding access to molecular imaging and therapy
- Increase knowledge among referring physicians about current value and future promise of molecular imaging

Patient Groups – Allies in the Era of Patient-centered Medicine

- **Patient Advocacy Advisory Board**
Eleven major patient advocacy organizations that advise us on patient-specific program development.
- **Programs:**
 - Patient Portal: Patient-focused website to explain molecular imaging and therapies for each disease
 - SNMMI Hill Day, May 1, 2016: accompanied by SNMMI members, patient deliver a powerful message about the value of NM and MI
 - Fact Sheets: Modality- and disease-specific brochures in print and online, 8 fact sheets now available in Spanish
 - Interactive Webinars: Allow patients to learn more and ask questions
 - Patient Education Day: Patient-focused track at our Annual Meeting; overview of nuclear medicine and breakout sessions (120 attendees)

Creating Partnerships with Referring Physicians

- Expert working groups with referring physician members
- **Referring Physician Initiatives**

Disseminating information about new technologies and recently developed AUCs via:

 - Joint sessions with referring physician societies
 - Road shows to reach local physicians unable to attend national meetings (free CME)
 - Disease-specific webinars with speaker duo – NM and referrer (free CME)
 - Updates to the Healthcare Provider audience page planned for the coming year

Disseminating Newly Developed AUCs

- New outreach working groups established to develop strategic dissemination plans for AUCs:
 - Bone scintigraphy in malignant disease
 - Hepatobiliary scintigraphy in abdominal pain
 - Ventilation/perfusion imaging in pulmonary embolism
 - FDG-PET/CT for re-staging malignant disease
- Additional working groups will be created as needed

Goal C

Facilitate and support the availability and clinical utilization of radionuclide therapy

Increase Appropriate Utilization of Radionuclide Therapy

- Advocate for the regulatory approval and reimbursement of emerging agents.
- Advance the use of approved agents
 - Radium-223 Cl_2 and radioimmunotherapy
 - NCI/SNMMI workshops on Targeted Radionuclide Therapy (March 2013, October 2014)
 - Roadshows on radionuclide therapy planned
 - Online education modules
 - Patient brochures on available therapies
 - Webinar series for referring physicians

Increase Appropriate Utilization of Radionuclide Therapy, cont.

- Educate nuclear medicine and referring physicians
 - SNMMI AM 2016 Categorical on “Imaging and Therapy of Neuroendocrine Tumors
 - Online modules for Maintenance of Certification to cover samarium/strontium, Ra-223, I-131, MIBG, PRRT, and RIT
 - Joint symposium with NANETS on October 1, 2016: Updates on imaging techniques and PRRT for NETs
 - Joint sessions at ATA on: September 22 and 23rd on the utility of pre-treatment scans and I-131 for Distant Metastasis

NCI-SNMMI Workshop on Targeted Radionuclide Therapy

- 2nd NCI-SNMMI Workshop held October 2014, Bethesda, MD
 - Oncologists, nuclear medicine physicians, radiation oncologists, physicists and basic scientists as well as industry & regulatory groups.
- Highlights:
 - Need for balanced, unbiased approach to assess the optimal positioning and integration of TRT in the therapeutic algorithm of cancer patients.
 - Research and clinical implementation of TRT must be actively pursued.
 - "Choose goals and weapons carefully; science and efficacy does not guarantee success." (e.g., Zevalin[®])
 - Overcoming barriers of effective TRT adoption by demonstrating competitive advantage over current standard of care with either solo, combination or sequential therapies with buy-in from the medical community.

NEW Therapy Center of Excellence

- Launched in Spring 2016
- Will bring together a centralized group of all constituents within this area, creating a multi-disciplinary interest group whereby industry, big pharma, physicians, scientists, government and regulatory agencies as well as other stakeholders can convene to share ideas, develop education offerings and advance the utilization of radionuclide therapy.
- Purpose
 - Provides a forum for members with similar interests
 - Provides expertise in TRT
 - Fosters research and education in TRT
 - Provides outreach to other professionals and organizations

Committee on Radioiodine Theranostics (CORT)

- To educate, develop, and promote the appropriate use of radioiodine theranostics
- To facilitate appropriate research of radioiodine theranostics
- To encourage the participation of nuclear medicine physicians in the issues involving radioiodine theranostics such as guidelines
- To encourage collaboration with our European and Canadian colleagues in the specialty of Nuclear Medicine regarding radioiodine

Goal D

Advance and promote quality, value and safety of molecular imaging and nuclear medicine

Evidence and Quality Department

- Department of Evidence and Quality created in 2014
- Focus and goals
 - Develop evidence-based clinical guidance documents: Appropriate Use Criteria and Procedure Standards
 - Collaborate and partner with other organizations to develop joint guidelines – working with 13 other medical specialty societies to develop multi-disciplinary AUC
 - Pilot clinical data registry on variability of administered dose in nuclear medicine
 - Education and training

Quality, Value, and Safety

- Maintenance of measure 147 on bone scintigraphy, the only PQRS (Physician Quality Reporting System) measure currently available to nuclear medicine
- Develop new quality measures for reporting in nuclear medicine
- Develop AUC for high-volume and high-value nuclear medicine procedures:
- Compile cost-effectiveness data and generate evidence

SNMMI AUC Development Project

- The Guidance Oversight Committee (GOC) formed 4 autonomous AUC working groups and identified subject matter experts to lead these multidisciplinary working groups:
 - Bone scintigraphy in malignant disease
 - Hepatobiliary scintigraphy in abdominal pain
 - Ventilation/perfusion imaging in pulmonary embolism
 - FDG-PET/CT for re-staging malignant disease
- To create a multi-disciplinary, evidence-based guidelines, the society is collaborating with 13 other specialty societies including the American Society for Clinical Oncology (ASCO), American Gastroenterological Association (AGA), European Association of Nuclear Medicine (EANM), Society of Thoracic Surgeons (STS), American Society of Hematology (ASH), Society of Pediatric Radiology (SPR) and Canadian Association of Nuclear Medicine (CANM) to participate in the development of AUCs.

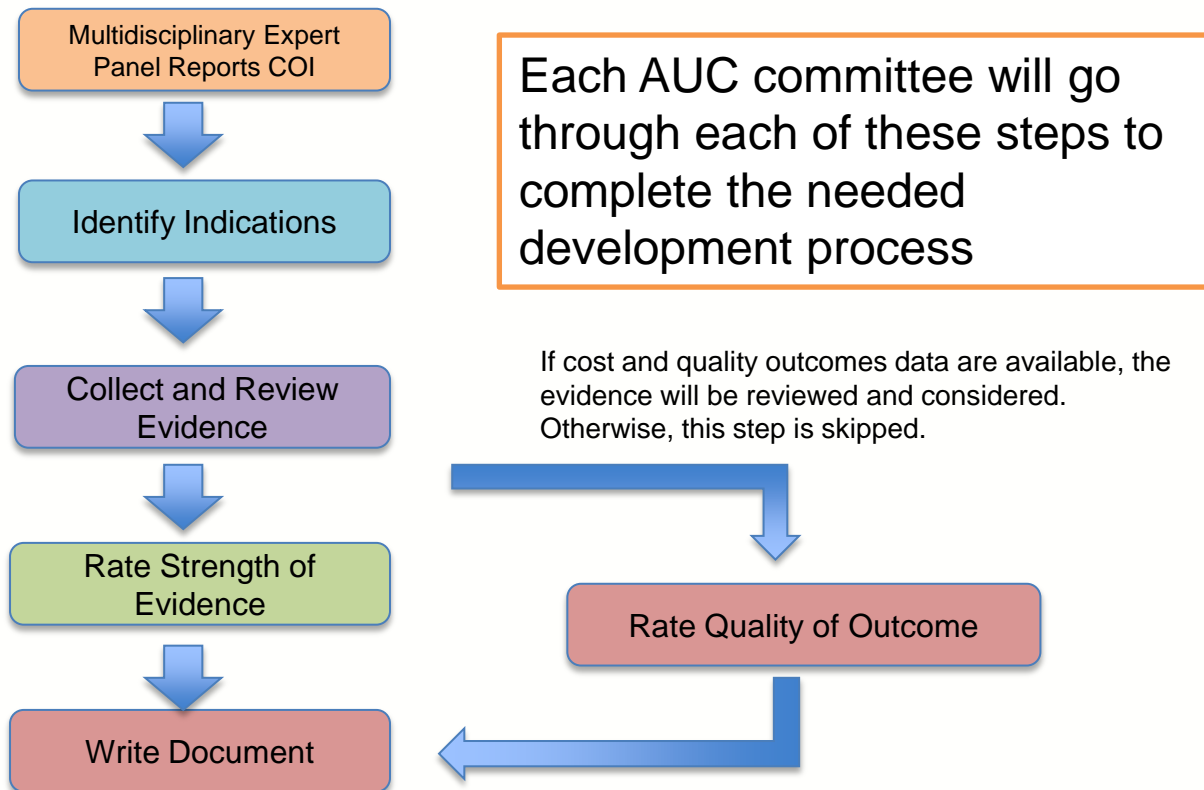
SNMMI AUC Development Project

- With assistance from Avalere, the society developed a template and formulated a standard AUC development process.
- The society contracted with Oregon Health Sciences University's Evidence Practice Center (EPC) to conduct the systematic review of existing evidence for 4 AUC workgroups as well as for the 6 new AUC topics
- Aggressive timeline for AUC development
 - Anticipated completion of 4 AUCs by end of third quarter of 2016
 - Once developed these AUC have to be reviewed and certified annually with regards to the quality and recency of evidence used

New AUC Topics for 2016 - 2017

- Nuclear Medicine Procedures for Diagnosis and Therapy for Thyroid
- Infection Imaging
- Somatostatin Imaging
- Gastrointestinal Transit
- Prostate Cancer Imaging
- PET Myocardial Perfusion Imaging

Overview of SNMMI's AUC Development Process



Medicare Physician Fee Schedule (MPFS) – Approved PLE

CMS has proposed a new process for AUC Development

- Organizations developing AUC have to follow a specified process to develop AUC, document that process, and apply to CMS to get certified as an “Approved” or “Qualified” Provider-led Entity
- The application to CMS must be made by December 31 – SNMMI applied last year
- Instead of reviewing individual AUC, all the documents produced by these “Approved” or “Qualified” provider led entities will be considered “deemed” or “approved”

SNMMI approved as “Qualified PLE” from CMS – June 30th 2016

SNMMI Current Status and Next Steps

- Develop 4 AUC by 4th quarter of 2016/ 1st quarter 2017
- Begin development of 6 new AUC by first quarter 2017
- Collaborate with other Societies/Organizations to get endorsements for the AUC under development and for developing additional AUC
- Work with CDS vendors to facilitate the hosting of SNMMI AUC into CDS tools
- Educate SNMMI members about AUC program and efforts undertaken by the Society
- Outreach and education of the referring physicians through collaborations with other specialty societies
- Continue to work with CMS and other regulatory entities

Recap - Appropriate Use Criteria - Timeline

As of today

SNMMI has one AUC on Amyloid, 4 in pipeline to be developed this year, and 6 to be developed later this year and next; no CDS delivery mechanism but talks ongoing with other CDS vendors

June 2016

CMS approves SNMMI as a qualified PLE

July/November 2016

MPFS 2017 – CMS to provide more guidance on the CDS portion of PAMA legislation including specifications and process to develop CDS

January 2018 (to be determined)

All referring/ordering physicians required to consult AUCs via an approved CDS mechanism prior to ordering any Advanced Diagnostic Imaging Service

Amyloid Imaging

- SNMMI and the Alzheimer's Association developed AUC to aid in the diagnosis of people with suspected Alzheimer's disease
 - Amyloid AUC published in J Nuc Med in 2013
- CMS NCD on amyloid brain imaging – Sept 2013 – allows one PET amyloid scan per patient through CED
- CED study for PET amyloid imaging (AA, WMIC, ACRIN, SNMMI)
 - Amyloid Imaging Coverage with Evidence Development workgroup submitted a draft protocol to CMS for PET amyloid imaging in patients satisfying the AUC
 - Revised protocol for “IDEAS” Study

IDEAS Study

- Imaging Dementia – Evidence for Amyloid Scanning (IDEAS) Study: *A Coverage with Evidence Development Longitudinal Cohort Study*
- Open-label, longitudinal cohort study to assess the impact of amyloid PET on patient outcomes in patients meeting AUC
- The primary hypothesis is that, in diagnostically uncertain cases, knowledge of amyloid status as determined by amyloid PET will lead to significant changes in patient management, and this will translate into improved medical outcomes

IDEAS – Study Aims

- Aim 1: To assess the impact of amyloid PET on the management of patients meeting Appropriate Use Criteria (AUC)
- Aim 2: To assess the impact of amyloid PET on hospital admissions and emergency room visits in patients enrolled in the study cohort (*amyloid PET-known*) compared to matched patients not in the cohort (*amyloid PET-naïve*) over 12 months.

IDEAS – Study Participant Eligibility

Participants must be Medicare beneficiaries, referred by qualified dementia specialists, who meet AUC for amyloid PET:

- Cognitive complaint verified by objectively confirmed cognitive impairment
- The etiologic cause of cognitive impairment is uncertain after a comprehensive evaluation by a dementia expert: general medical and neurological examination, mental status testing including standard measures of cognitive impairment (e.g. MMSE, MCA), lab testing for toxic-metabolic disturbances and structural neuroimaging (CT or MRI)
- AD is a diagnostic consideration
- Knowledge of amyloid PET status is expected to alter diagnosis and management

IDEAS – Study Participant Eligibility

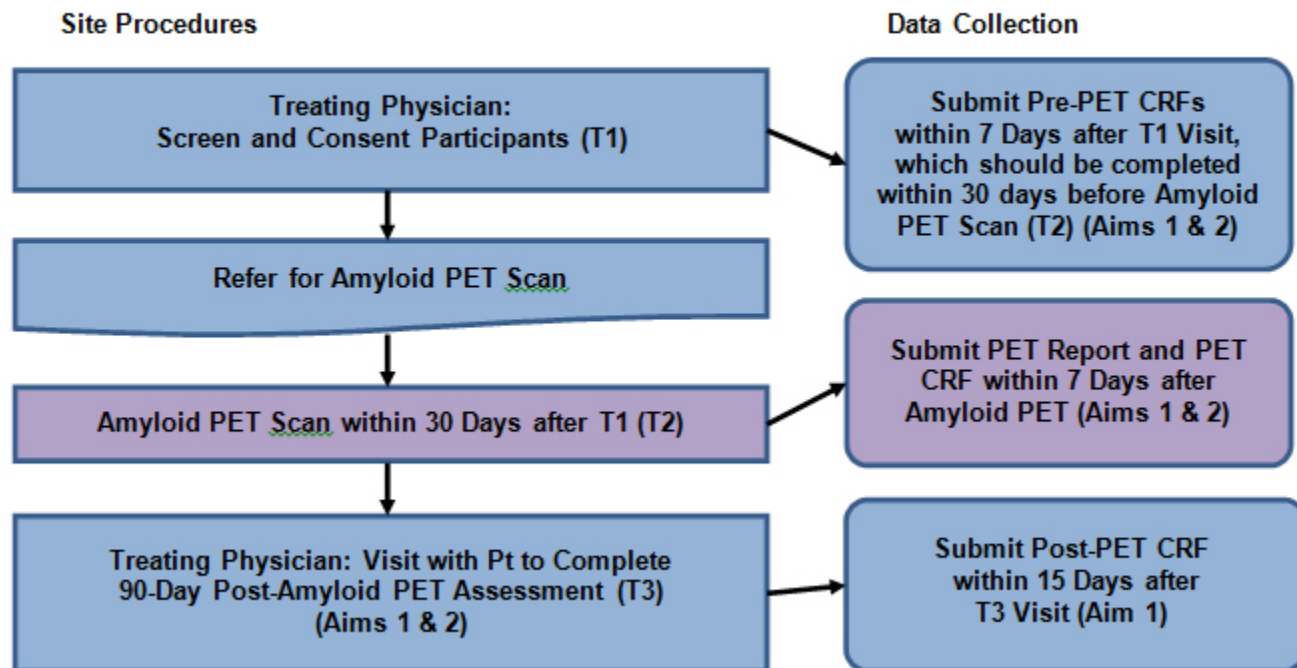
- Patients will be recruited into one of two sub-cohorts:
 - Progressive, unexplained mild cognitive impairment (MCI); and
 - Dementia of uncertain etiology

IDEAS – Study Sample Size and Cost

- A total of 18,488 Medicare beneficiaries meeting AUC will be enrolled over 24 months at sites throughout the United States.
- Aim 1. The projected prospectively-recruited sample size of amyloid PET-known participants for Aim 1 is 11,050 participants (assuming a distribution of 40% dementia and 60% MCI).
- Aim 2. The projected prospectively-recruited sample size of amyloid PET-known participants for Aim 2 is 18,488 participants.
- The study will cost approximately \$27 million
- Protocol was approved by CMS and is currently enrolling

IDEAS Study – Flow Chart

SCHEMA: Longitudinal Cohort



Advancing Quality, Value & Safety Through Dose Optimization

SNMMI actively promotes *optimizing* dose so patient receives smallest possible amount of radiopharmaceutical that will provide the appropriate diagnostic information.

- Working closely with NRC on rewrite of Part 20 and Part 35 –which includes possible changes to training and experience
- SNMMI website on dose optimization: www.snmmi.org/dose
- Two SNMMI dose tools — Nuclear Medicine Radiation Dose Tool, Pediatric Injected Activity Tool: downloaded close to 30,000 times
- SNMMI participates in and promotes:



IMAGE WISELY™

Radiation Safety in
Adult Medical Imaging

image
gentlySM



Goal E

Support and enhance the professional workforce and environment

Professional Workforce and Environment

- Provide education to promote best practices, review current research, and understand emerging technologies and their applications:
 - CE courses and scientific presentations at SNMMI meetings
 - Enduring CE courses delivered online through the SNMMI Learning Center
 - Live webinars on a variety of topics throughout the year
 - Journal of Nuclear Medicine CE articles
 - MOC activities for physicians to support both Self-Study (Part II) and Practice Improvement (Part IV) requirements delivered in live and enduring formats

PET/MR Credentialing Task Force

- American College of Radiology / SNMMI joint effort
- Co-chaired by Rathan Subramaniam, MD, PhD, from ACR and Hossein Jadvar, MD, PhD, from SNMMI
- Published April 2015 – *ACR/SNMMI Approve Joint Credentialing Statement for PET/MR: Brain*
- Full body PET/MR – due out Spring 2017.
- Next Focus – Cardiology – due out Fall 2017.

Annual Future Leaders Academy

- Future Leaders Academy
 - Included facilitated discussion on effective communication, conflict resolution, ethics and professionalism
 - Attendees assigned mentors (current leaders in the field)
 - Attendees were assigned to SNMMI committees to ensure continued leadership development.
- Next Academy will be held at the 2018 Mid Winter Meeting.
 - Applications will be available in Spring 2017



Women in Nuclear Medicine (WINM)

- **Purpose:**
 - promote women physicians and scientists in nuclear medicine and molecular imaging;
 - foster the development of professional interests
 - address problems encountered in the practice of nuclear medicine:
promoting leadership and career development in women
 - raise awareness of scientific contributions of women in nuclear medicine: recognizing the challenges of balancing career and family
 - promote fair and equitable treatment, and improving the climate for women in nuclear medicine in all stages of their careers.
- 2nd Annual Afternoon Tea – was held during the 2016 Annual Meeting
- WINM Luncheon held during the 2017 Mid-Winter Meeting
- Book Club in February, May and October 2016
- WINM e-newsletter was distributed in April 2016.

Council/Center Internship Program

- Created several years ago to involve young professionals in SNMMI at the council and center levels
- Participate in board meetings, assigned projects, provided travel support
- Each council/center (15) selects one intern for a 2-year term
- New interns will begin their terms in June 2017 – final selection process is currently underway.

Reaching the Larger NM/MI Community

- SNMMI provides comprehensive news for the community
 - SNMMI SmartBriefs – daily news for 16,000+ subscribers
 - SNMMI's social networks
 - LinkedIn community – 10,000+ members
 - Facebook community – 10,000+ likes
 - Twitter – almost 2,000 followers
 - New Instagram site to launch this summer
- SNMMI books – Educational materials for members and the community
 - Important monographs
 - Required reading for most technologist education programs
 - New e-book series: Quality, Safety, and Dose Optimization
 - Myocardial Perfusion Imaging
 - Abdominal imaging



Professional Development: Henkin and Slosky Fellowships

- **Henkin Fellowship** – Thomas Hope and Jolepalem Prashant
2016 Robert E. Henkin Government Relations Fellows
 - Program designed for young professionals
 - Week in DC learning the federal legislative and regulatory processes
 - Advocated on Capitol Hill and met with FDA, CMS, NIH, NRC, DOE/NNSA, OSTP White House officials plus ASNC and ASCO
- **Slosky Fellowship** – Katherine Zukotynski – 2016 Ursula Mary Kocemba-Slosky, PhD, Professional Relations Fellowship recipient
 - Program designed for young professionals to learn about intersociety relations
 - Week in DC learning how SNMMI interacts with medical societies and other professional organizations
 - Met with ACR, ASNC, ACC, CORAR, MITA, AdvaMed, etc.
 - Advocated on Capitol Hill and met with DOE

Goals for International Cooperation

Consider nuclear medicine and molecular imaging needs from an international perspective

- Global standardization – nuclear medicine global initiative; harmonization with Image Gently and Image Wisely guidelines
- Leverage SNMMI's diverse international membership and relationships with international nuclear medicine and molecular imaging societies to:
 - Assess the evidence landscape beyond the U.S.
 - Standardize data development processes internationally
 - Incorporate international considerations in SNMMI's strategic goals
 - Leverage experiences of other countries to support SNMMI's value in the U.S. healthcare environment

Goals for International Education

Provide educational opportunities for healthcare professionals in developing countries

- Examples of educational programs:
 - Sino-American Nuclear Medicine Conference – a collaborative, international symposium
 - Wagner-Torizuka Fellowship – a program that supports young fellows for study with a mentor in the U.S.
 - Live online case reviews in collaboration with IAEA
 - SNMMI online learning resources
 - Educational webinars – live online training sessions
 - Road shows and workshops – face-to-face educational experiences

International Participation in SNMMI

The 2016 Annual Meeting had a total of 5,769 attendees representing 67 countries.

- 35% of the attendees were from outside the U.S.
- 2211 scientific abstracts were submitted, compared to 2091 submissions in 2015, a 7% increase.

The Journal of Nuclear Medicine

- >1,200 submissions a year, 70% of which are international

International Cooperation

Nuclear Medicine Global Initiative

To encourage global collaboration in education; to harmonize procedure guidelines and other policies or to improve quality and safety.

- Organizations involved:
 - Nuclear medicine societies – China, Japan, Korea, India, Australia/New Zealand, Canada, South Africa
 - Multinational organizations – EANM, IAEA, WFNMB, ALASBINM, AOFNMB
- SUCCESSFUL 1st Project - *Standardization of Administered Activities in Pediatric Nuclear Medicine: A Report of the First Nuclear Medicine Global Initiative Project, Part 1: Statement of the Issue and a Review of Available Resources; Part 2: International Survey Results*
- 2nd Project – *Availability of Radiopharmaceuticals* – aims to establish the availability, use, access issues and impediments to the use of diagnostic and therapeutic radiopharmaceuticals globally.

International Cooperation

WFNMB

- Members of the WFNMB Governing Council
- Participating in a strategic committee to look at structure and function of WFNMB



SOCIETY OF
NUCLEAR MEDICINE
AND MOLECULAR IMAGING

Technologist Section

Veterans Affairs Proposed Rule Amendment 38 CFR Part 17

- Section 17.414(d)(1)(i)(B)
- Grants Certified Nurse Practitioner's (CNP) the full practice authority to “perform”, “supervise” and “interpret laboratory and imaging studies.”
- Perform imaging studies? – wait that’s our job
- Interpret and supervise imaging studies? – OMG that’s my docs job

Veterans Affairs Proposed Rule Amendment 38 CFR Part 17

- Address patient access issues
- Website has received over 100,000 comments
- What is SNMMI doing about it?

Veterans Affairs Proposed Rule Amendment 38 CFR Part 17

- SNMMI opposed this amendment
- Qualifications to interpret imaging studies
 - 7 – 10 years of rigorous training
 - Medical school, internship, radiology – nuclear medicine
- NRC regulations
 - Authorized user write directives needed
 - Supervise
 - Change a specific protocol

Veterans Affairs Proposed Rule Amendment 38 CFR Part 17

- SNMMI is opposed to the VA allowing CNP's full practice authority to perform these studies. Allowing CNP's to "perform", "supervise" and "interpret" laboratory and imaging studies will compromise, not enhance, the level of care received by veterans.
- Update – The VA announced on December 14, 2016 that it removed language that CNPs could perform and interpret medical imaging studies.

VA Working to Resolve Issue of Qualified NMTs Not Being Allowed to Perform Diagnostic CT Services

- SNMMI sent informal comments to the U.S. Department of Veterans Affairs (VA) in October asking that the VA modify its qualification standards for the practice of diagnostic CT.
- The VA has responded that it is aware of this issue and is actively working toward a resolution.
- It agrees that nuclear medicine technologists with certification should be able to perform advanced CT procedures.

What is going on right now?

- Education
 - CT Education – to assist in gaining the required didactic CE for the NMTCB and/or ARRT exam.
 - Adjunctive Medications – what you need to know!
 - Small CE courses
 - Will met ARRT requirements
 - Also compliant with NMTCB
- Defending Your Profession & Your Job – short “need to know” documents that will help you to defend your scope of practice – TAB

ASRT Practice Standards – SNMMI-TS Response

- Missing Terms & Duties
 - Adjunctive Medications – need to define
 - Hybrid Imaging – need to define
 - Handling Radiopharmaceuticals - need to define
 - Drawing Blood – need to add
 - Diagnostic CT – this is adequately stated in ASRT's CT Practice Standards but not referenced in their Nuclear Medicine Technologist standards. We suggest ASRT at least refer/link to their CT standards for easy reference and to avoid confusion.

Quality Initiative - Benchmarking Study

Quality Benchmarking Study – Identifying the Landscape of Nuclear Medicine Technology

- The survey was developed to understand:
 - what technologists believe “quality” means
 - what they are being asked to do as part of their current job
 - if they believe that they received appropriate education prior to being hired as a technologist
 - if they have been adequately trained on any additional techniques or equipment since starting their job
 - what they believe the future of the field looks like respective to quality measures and outcome based medicine.

Project Overview



Survey Response Statistics

Total Responses	4,007
<i>Complete Responses</i>	<i>2,698</i>
<i>Partial Responses</i>	<i>1,309</i>
Deliveries	27,989
Response Rate	14.3%

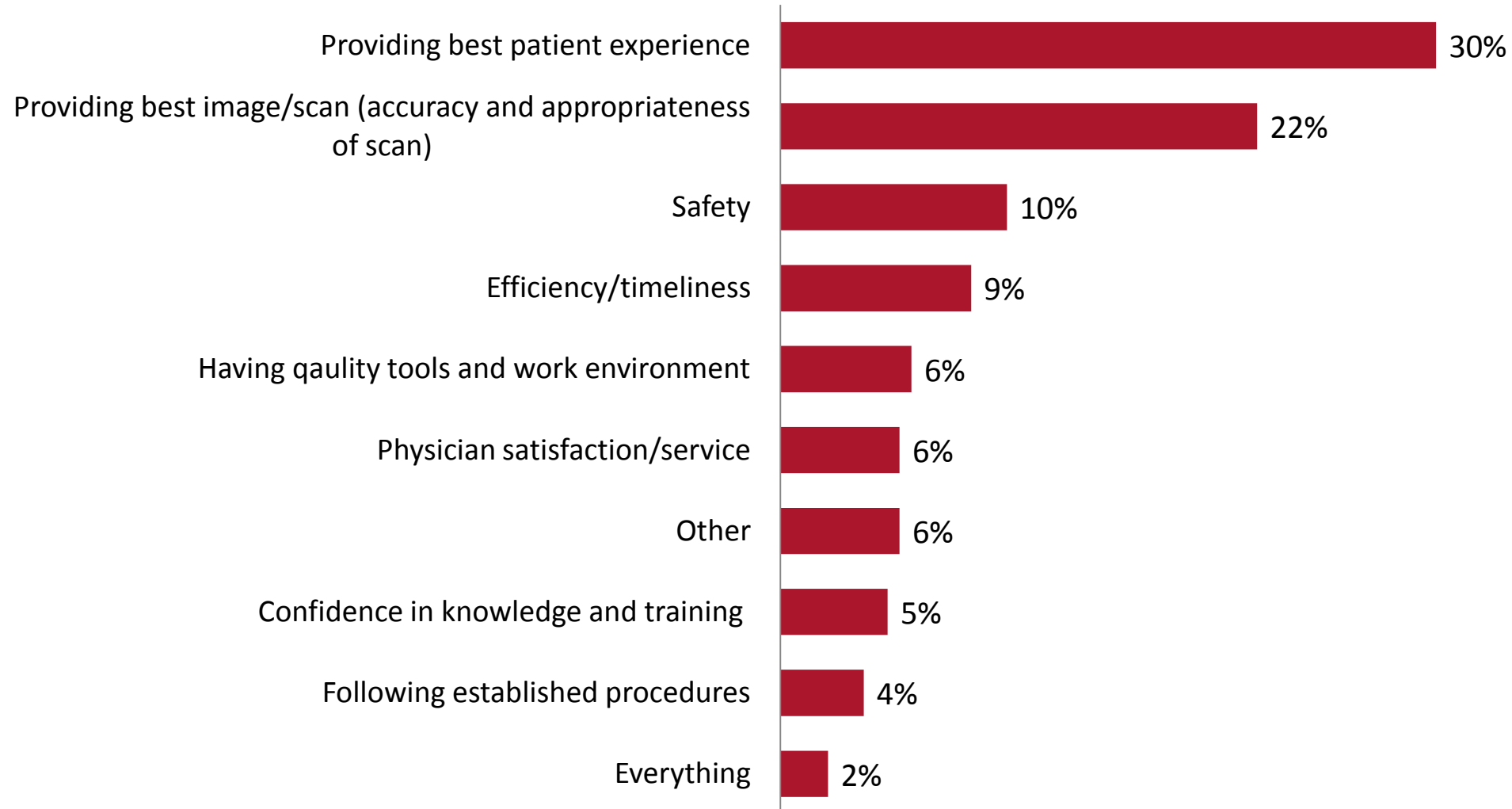
Response Rates by Contact List:

- SNMMI Technologists Contact List: **13.0% (1,079 total responses)**
- Nuclear Medicine Technology Certification Board (NMTCB) CNMT Active Certificants Contact List: **16.7% (2,466 total responses)**
- Nuclear Medicine Technology Certification Board (NMTCB) CNMT Inactive Certificants Contact List: **4.1% (95 total responses)**
- American Registry of Radiologic Technologists Contact List: **14.0% (367 total responses)**

Perceptions of Quality

Please use the space below to explain what quality in your workplace means to you.

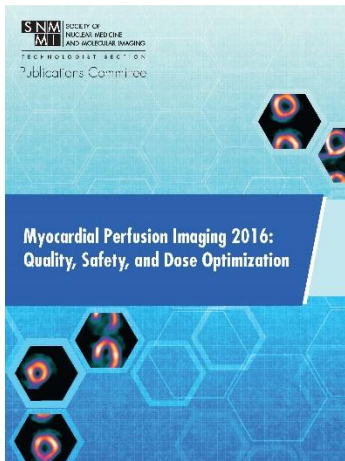
Sample of 100 Open-ended Responses



NEW! FREE Quarterly Webinars

- Introducing a new member-benefit.
- Stay on top of the latest trends and advancements in the profession with quarterly technologist-focused webinars—free for SNMMI-TS members.
- 2017 Schedule of Webinars
 - 4/10 - Michele Egberts - Radiopharmacy/Radiation Safety
 - 7/11 - Lynne Roy - Advocacy
 - 10/3 - Jessica Williams - New Radiopharmaceuticals

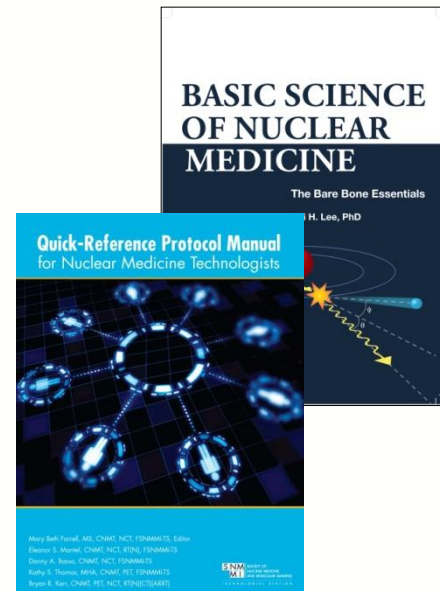
Books for Technologists



Myocardial Perfusion Imaging 2016: Quality, Safety and Dose Optimization (FREE to members / e-book only)

Basic Science of Nuclear Medicine: The Bare Bone Essentials, by Kai H. Lee, PhD

- *The Quick-Reference Protocol Manual for Nuclear Medicine Technologists*
- *Practical Mathematics in NMT – 2nd Edition*



Grants and Awards

- 2017 Paul Cole Technologist Scholarship
- 2017 ARRT/SNMMI-TS Professional Development Grant
- 2017 SNMMI-TS/ERF Bachelor's Degree Completion Scholarship
- 2017 SNMMI-TS/ERF Advanced Degree Scholarship
- 2017 PDEF Professional Development Scholarship
- 2017 SNMMI-TS/ERF Graduate Program Grant
- 2017 PDEF Mickey Williams Technologist Minority Scholarship
- 2017 Travel Grants (tied to Annual Meeting Abstracts)

Thank you!
Questions?

