

October 17, 2014

Joyce Marshall
The Joint Commission
Standards and Survey Methods
Diagnostic Imaging Services Field Review
One Renaissance Blvd.
Oakbrook Terrace, IL 60181

RE: Proposed Revisions for Diagnostic Imaging

Ms. Marshall:

The Society of Nuclear Medicine and Molecular Imaging (SNMMI) would like to thank The Joint Commission (TJC) for the opportunity to comment on the Proposed Revisions for Diagnostic Imaging, specifically as it relates to nuclear medicine technologists. As you know, SNMMI is a nonprofit scientific and professional organization that promotes the science, technology and practical application of nuclear medicine and molecular imaging. SNMMI strives to be a leader in unifying, advancing and optimizing molecular imaging, with the ultimate goal of improving human health. With 18,000 members worldwide, SNMMI represents nuclear and molecular imaging professionals, all of whom are committed to the advancement of the field.

SNMMI is very appreciative that the TJC is regulating the training and competency of those that perform diagnostic computed tomography (CT). We also understand how difficult these regulations can be due to the assorted educational pathways, certifications, and lack of licensure in some states. For that reason, we believe a brief historical perspective may help as TJC moves forward in finalizing these revisions.

In the 1950s, the differences between radiography and nuclear medicine were realized. To that end, The American Society of Clinical Pathologists (ASCP) and the American Registry of Radiologic Technologists (ARRT) developed specialty certification for those that were practicing nuclear medicine. In 1971, nuclear medicine became its own medical specialty due to its differences with radiology. In 1977 the Nuclear Medicine Technology Certification Board (NMTCB) was formed to focus only on nuclear medicine.

By the early 2000s, the lines became blurred again when hybrid scanners that fused CT with single-photon emission computed tomography (SPECT) and positron emission tomography (PET) were created. Initially, CT was used only for attenuation to improve the resolution of SPECT and PET images. However, as the technology advanced, these scanners became capable of producing diagnostic CT images, no different from those produced by stand-alone CT scanners. Imaging professionals recognized the need to define who could operate these scanners and what training would be needed.

Summits were called in 2001 and 2007 that included imaging stakeholders. The summits' outcomes (Exhibits A and B) concluded that radiology technologists, nuclear medicine technologists, and radiation therapists could operate PET/CT scanners with additional training. The specifics of each profession's

training were discussed, and the professional organizations and certification boards were urged to develop a continuing educational pathway for their constituents currently in practice. (Please note, SPECT was not included in this white paper. SPECT is de facto nuclear medicine and in order to perform SPECT, one must graduate from an accredited nuclear medicine school. In addition, most SPECT scanners only perform attenuation correction.)

To that end, the ARRT developed criteria for nuclear medicine technologists who were not registered radiographers to sit for their advanced CT certification exam. The NMTCB developed criteria that allowed those who were not registered nuclear medicine technologists to sit for their advanced certification PET exam.

Since diagnostic CT was becoming a mainstay in nuclear medicine departments, the Joint Review Committee on Educational Programs in Nuclear Medicine Technology (JRCNMT) developed Accreditation Standards for Nuclear Medicine Technologist Education that required all nuclear medicine schools to teach X-Ray physics, diagnostic CT technology, cross sectional anatomy, and contrast pharmacology (Exhibit C). These standards have been a required part of the nuclear medicine curriculum since 2010. The NMTCB primary certification examines competency in CT (Exhibit D). Due to the focus on CT in accredited nuclear medicine schools and licensing laws, many states now allow nuclear medicine technologists to perform diagnostic CT scans on stand-alone and hybrid equipment. The NMTCB recently created a new entry-level certification exam for computed tomography (CT) this credential is considered an extension of the entry-level nuclear medicine exam and is designed to establish the competency of a nuclear medicine technologist to perform CT procedures.

Standard 19 in the Proposed Revisions for Diagnostic Imaging has removed the ability of nuclear medicine technologists to perform diagnostic CT scans on stand-alone CT scanners, unless licensed to do so. Standard 19 also appears to allow radiographers with no CT training to operate stand-alone CT scanners.

Furthermore, Standard 21 is unclear as to what is being regulated. It states that it allows nuclear medicine technologists registered by the NMTCB with additional CT training to operate PET/CT and SPECT/CT scanners. This is somewhat at odds with standard 19 in that it does allow nuclear medicine technologists, albeit with conditions, to perform diagnostic CT scans.

In addition, Standard 21 appears to be regulating the performance of nuclear medicine exams, as the majority of nuclear medicine departments now have SPECT/CT and PET/CT scanners. It also appears to be stating that only certified NMTCB technologists with additional CT training can operate nuclear medicine equipment even if it is used for attenuation correction. Standard 21 seems to allow radiographers the ability to perform nuclear medicine studies without graduating from a nuclear medicine school and being certified as nuclear medicine technologists. In that ARRT (N) is not included in the standard, it appears to prohibit these individuals from performing bread and butter SPECT/CT and PET/CT scans. This standard, as written, has the potential to eliminate many nuclear technologists from performing nuclear medicine scans and has significant patient access issues which would result in job loss for a large number of nuclear medicine technologists. To reiterate, in order to perform SPECT scanning, one must be a certified nuclear medicine technologist. Please see the Nuclear Medicine

Technologist Scope of Practice (Exhibit E). Other imaging professionals can perform PET with the appropriate training.

Due to the exceptionally confusing language of Proposed Standard 21, in addition to the possible unintended consequences of such language, SNMMI respectfully recommends that TJC eliminate Standard 21. Instead, we ask that TJC focus only on the qualifications and training of those who perform diagnostic CT scans, regardless of the kind of technology that it is performed on or the professional credentials of those individuals performing them. For any given CT protocol, a diagnostic CT scan can use the same kVp and mA and can deliver the same CTDI and DLP, normalizing for the patient habitus and the manufacturer. To further reduce confusion, SNMMI respectfully recommends that attenuation CT be differentiated from diagnostic CT and not be included in these standards.

SNMMI believes that the training and credentials of professionals operating CT scans is what assures the safe operation of CT scanners to deliver quality images. CT is already a part of the existing curriculum in all accredited nuclear medicine programs, and entry level technologists with NMTCB (CNMT) or ARRT (N) certification are as qualified as those with ARRT (R) certification to perform diagnostic CT exams.

In summary, SNMMI would like to recommend the following language.

Technologists who perform diagnostic computed tomography (CT) exams are qualified as follows:

- *Have state licensure that permits them to perform diagnostic CT exams or*
- *Are registered and certified in radiography by the American Registry of Radiologic Technologists (ARRT) and have participated in on-the-job-training or a formal diagnostic CT program, or*
- *Are registered and certified in nuclear medicine by the Nuclear Medicine Technology Certification Board (NMTCB) or by the ARRT (N) and have participated in on-the-job-training or a formal diagnostic CT program.*

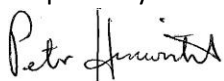
Note 1: *Certification by ARRT or NMTCB in computed tomography is not required, although it would meet the intent of this element of performance and is strongly recommended and encouraged.*

Note 2: *Cone beam computed tomography used in dental exams is not included.*

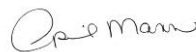
Note 3: *CT used in nuclear medicine exams such as SPECT or PET for attenuation correction is not included.*

SNMMI remains grateful for your availability and assistance as we discuss the Proposed Revisions for Diagnostic Imaging. As always, SNMMI is ready to discuss any of its comments with The Joint Commission. In this regard, please contact Susan Bunning, Director, Government Affairs, by email at sbunning@snmmi.org or by phone at 703-326-1182.

Respectfully Submitted,



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