

October 4, 2023

The Honorable Shereef Elnahal, M.D., M.B.A Under Secretary for Health Department of Veterans Affairs 810 Vermont Ave. NW, Washington, DC 20420 Submitted via email: VA.NSP@va.gov

Re: VA National Standards of Practice- Comments of the American College of Radiology

Dear Dr. Elnahal,

The American College of Radiology (ACR) – a professional organization representing more than 41,000 radiologists, radiation oncologists, interventional radiologists, nuclear medicine physicians, and medical physicists – appreciates the opportunity to provide feedback on the department's recent "National Standards of Practice" listening sessions. The ACR supports the VA's efforts to address challenges within its health system and acknowledges the VA's public engagement efforts on the proposed standards. However, the College remains concerned about expansion of the scope of practice of non-physician providers (NPP) into clinical areas beyond their education and training. Physicians are uniquely equipped with the necessary education, training, and clinical experience to lead and supervise complex healthcare teams. In the specialized field of radiology, which uses complex equipment and ionizing radiation, medical diagnosis and radiologic care will be optimized by organizing these services under the supervision of physicians specially trained in medical imaging.

Radiologists have extensive expertise in the selection and utilization, as well as the sequencing of radiological procedures and techniques. In contrast, NPPs's education and experience do not equip them with the skills and expertise to: perform a complete analysis of the patient's past medical history and interventions, synthesize, and arrive at a clinically effective and cost-effective diagnosis. The oversight and performance of radiological procedures or treatments by those with less training have been shown to lead to an increase in utilization and a decrease in quality of care and cost-effectiveness. Therefore, diagnostic radiology, interventional radiology, nuclear radiology/medicine, and radiation oncology teams providing imaging and therapy services must be led by qualified radiologists, interventional radiologists, and radiation oncologists, respectively, and services should include consultation, supervision, interpretation with a final report, differential diagnosis, and subsequent evaluation for diagnostic studies.

Interpretation of Diagnostic Imaging

While NPPs are expected to incorporate imaging report results into clinical decision-making during their professional care delivery, rendering interpretations of medical imaging studies (preliminary, final, or otherwise) is beyond their scope of practice and should not be performed by any nonphysician members of the healthcare team, including radiologic technologists, medical sonographers, advanced practice nurses, physician assistants, and others. The interpretation of radiologic studies is more complex than identifying a finding on an image; it requires expertise in synthesizing all elements of the clinical presentation to discern the significance of what the imaging reveals. Additionally, imaging exams are not always clearly expressed and anatomical structures can conceal features of clinical interest. For example, a lung tumor may be partially covered by a rib or hidden behind the heart. Simply stated, NPPs do not

¹ Krupinski EA. Current perspectives in medical image perception. Atten Percept Psychophys. 2010 Jul;72(5):1205-17. doi: 10.3758/APP.72.5.1205. PMID: 20601701; PMCID: PMC3881280.



possess the competencies needed to reliably interpret radiological exams. Therefore, NPPs should never be permitted to render interpretations of medical imaging studies, whether under physician supervision or as an independent nonphysician healthcare provider.

A physician specializing in radiology will undergo a minimum of 10 years of comprehensive training beyond their undergraduate degree. The education and training for the practice of radiology includes extensive study in the physics and biological implications of radiant energy and the physics of medical imaging, radiation protection, and the application of ionizing radiation and non-radiation emitting modalities in the diagnosis and treatment of disease. While in medical school, radiologists learn anatomy, physiology, pathology, pharmacology, and pathophysiology as is required of all graduating physicians. Years of medical school education are followed by a one-year clinical internship (PGY-1), and a four-year residency program (PGY 2-5), interpreting tens of thousands of imaging studies under the supervision of a practicing radiologist. Radiology residents typically spend at least four weeks or 130 lecture hours in an intensive Radiologic Pathology Correlation Course entailing a comprehensive review of all imaging modalities, the radiologic presentation of a broad range of diseases and pathologic basis from all organ systems, with emphasis on the principles of radiologic-pathologic correlation. Critical, and essential to all of this training, which is lacking in that of NPPs, is the ability to synthesize all elements of a patient's past and current clinical issues to render an appropriate diagnosis and recommendations.

Upon completion of their residency program, radiologists must pass multiple sets of examinations to attain initial certification (IC) and they must maintain that certification throughout their careers, through participation in continuing certification (CC) programs. These CC programs require annual attainment of continuing medical education (CME), self-assessment of knowledge, and practice improvement elements. An image-rich IC Core Examination tests knowledge and comprehension of anatomy, pathophysiology, all aspects of diagnostic radiology, and physics concepts important for diagnostic radiology. This exam also covers eighteen subspecialty and modality categories including breast, cardiac, gastrointestinal, interventional, musculoskeletal, neuroradiology, nuclear, pediatric, reproductive, endocrinology, thoracic, urinary, vascular, computed tomography, magnetic resonance, radiography, fluoroscopy, ultrasound, physics, biology, and radiation safety.

In stark contrast, there are no radiology-specific standardized training programs for NPPs. The difference in rigor and standardization between medical school with additional residency and nurse practitioner programs is also noteworthy. Training to become an advanced practice registered nurse (APRN) is either a two- or three-year postgraduate master's or doctoral degree and between 500-720 hours of clinical training. A survey of family nurse practitioner (NP) program directors reported that, within their programs, 25% of NPs had no radiologic training, 40% had less than 10 hours, 33% had 1-2 days, and 2% had a few weeks. Lastly, roughly 85% of the existing 533 Doctor of Nursing Programs (DNP) have a nonclinical focus on administrative and leadership skill tracks.

Radiologists, in addition to their 13-plus years of education, also complete between 12,000-16,000 hours of clinical patient care during their training. In comparison, the current physician assistant (PA) education model is two to three years in length with only 2,000 hours of clinical care—and no residency requirement. A survey of PA program directors found that only 23% of programs included ultrasound in

² Kirkland SA, Champion JD. Radiologic imaging content in family nurse practitioner programs: A needs assessment. *J Nurse Pract* 2018:14(3): e63-66.

³ Mundinger, M.O. Carter, M.A. (2019). Potential Crisis in Nurse Practitioner Preparation in the United States. *Policy, Politics, and Nursing Practice*, 20(2), 57-63.



their curricula, and another survey of graduating PAs found that 84% reported receiving insufficient ultrasound training.

Performance of Radiological Procedures

A few examples of radiological procedures are conventional radiography, computed tomography (CT), magnetic resonance imaging, nuclear medicine scans, vascular interventional, and procedures involving fluoroscopic equipment. Considering computed tomography alone, there are over 80 million CT scans performed in the United States each year⁶, and these procedures use ionizing radiation, which poses unique safety considerations. Some modalities, such as fluoroscopy, can deliver very high radiation doses during prolonged procedures. NPPs do not have the required expertise, knowledge, and skills to perform these highly technical radiological procedures and should not be doing so. Any NPPs who might be appropriately qualified should rely on the overall direction and supervision of a qualified physician. A separate consideration is warranted for procedures that involve certain ultrasound modalities. There are instances where NPPs are relied upon for the provision of sonography services, such as in the case of targeted point of care ultrasounds (POCUS) that can be useful as a limited bedside evaluation adjunct to the physical examination, but as it relates to the complexity of these procedures, provision of POCUS services fundamentally differs from comprehensive diagnostic ultrasound examinations such as those ordered by clinicians and performed in radiology departments with interpretation by radiologists. These comprehensive diagnostic exams are multifaceted and include elements such as transducer selection, appropriate positioning of the patient, and image acquisition, to name a few.

Supervision of Radiological Procedures

Diagnostic or therapeutic procedures utilizing ionizing radiation should be performed only under the supervision of a qualified radiologist, radiation oncologist, or nuclear medicine physician trained in the biological and physical effects of such energy forms on the human body and in their medical use. Radiologist-led teams are essential to ensuring quality in diagnostic imaging; moreover, it is essential that the supervising radiologist be able to assess the quality of an image relative to the capability of the equipment and diagnostic demands and minimize unnecessary radiation exposure to the patient and personnel.

Physician assistants (PA), nurses, and other NPPs often work in interventional radiology suites, under the supervision of a radiologist, using fluoroscopic equipment. Fluoroscopy is a technique using ionizing radiation that provides real-time X-ray imaging that is especially useful for guiding a variety of diagnostic and interventional procedures. The radiation dose for modern fluoroscopic equipment depends greatly on the operator's skills, competence, and experience. Removing the safeguards of proper physician supervision would be detrimental to the patient, clinician, and overall radiation safety environment in the VA.

Ordering of Diagnostic and Advanced Imaging

A blanket policy allowing for ordering of advanced diagnostic imaging studies, without physician oversight, risks patient harm from inappropriate exposure to ionizing radiation and would undoubtedly lead to an increase in healthcare costs. Equally critical may be the delayed or lost opportunity to render a

⁴ Rizzolo D, Krackov RE. Integration of ultrasound into the physician assistant curriculum. *The J Physician Assist Educ* 2019; 30(2):103-110.

⁵ Barnett M, Pillow MT, Carnell J, et al. Informing the revolution: A needs assessment of ultrasound knowledge and skills among graduating physician assistant students. *J Physician Assist Educ* 2018; 29(3):173-176.

⁶ Radiation risk from medical imaging. *Harvard Health*. (2021, September 30). https://www.health.harvard.edu/cancer/radiation-risk-from-medical-imaging



correct diagnosis and initiate appropriate care. A study published in the Journal of the American Medical Association (JAMA) found that NPPs when compared to physicians, ordered more diagnostic imaging. Another study in the American Journal of Emergency Medicine found that in 34 percent of emergency department cases, NPPs recommended imaging studies when physicians had not. More recent data, from the January 2022 edition of the Journal of the Mississippi State Medical Organization, found that over a 10-year period, physicians when compared to NPPs performed better on 9 out of 10 key Center for Medicare & Medicaid Services (CMS) Accountable Care Organizations (ACOs) quality measures, including an average percentage of breast, colon and cervical cancer screenings and that NPP- led care, in the Hattiesburg, MS Clinic, led to higher costs for patients and payers to the tune of 28 million dollars annually.

A study, published last month in the Journal of the American College of Radiology (JACR), found that over 82 % of head and neck computed tomography angiography (CTA) exams performed in the emergency department had no actionable findings for patients with non-focal neurologic complaints and that 67 % percent of the exams were ordered by NPPs.¹⁰

A survey, published in the Joint Commission Journal on Quality and Patient Safety, found that radiologists self-reported one of the highest physician task loads (PTL) scores of any specialty. This study also observed the relationship between PTL and burnout and found that for every 10% decrease in PTL scores, there were 33% lower odds of experiencing burnout.¹¹

Policies that limit ordering advanced imaging studies and mandated use of provider decision support tools (such as physician-developed appropriateness criteria) serve to ensure that members of the healthcare team ordering advanced imaging procedures have taken into account the suitability of the study including radiation safety considerations. As overall leaders in healthcare teams, physicians are uniquely equipped with the knowledge and training to assess the appropriate need for advanced imaging and the relative radiation exposures for the various imaging exams that use ionizing radiation (plain X-rays, fluoroscopic studies, CT scans, and nuclear medicine studies), and to balance the medical benefit for any of the ordered imaging exams against any potential risk associated with that exam.

(Therapeutic Radiologic Technologist (RTT), Diagnostic Radiologic Technologist (RT), Radiologist Assistant (RA)

To maintain the quality and safety of radiologic care, the performance of radiological procedures should be restricted to licensed personnel who have received proper specialized, comprehensive, and accredited

⁷ D.R. Hughes, et al., A Comparison of Diagnostic Imaging Ordering Patterns Between Advanced Practice Clinicians and Primary Care Physicians Following Office-Based Evaluation and Management Visits. *JAMA Internal Med.* 2014; 175(1):101-07.

⁸ Seaberg DC, MacLeod BA. Correlation between triage nurse and physician ordering of ED tests. *Am J Emerg Med.* 1998; 16(1):8-11.

⁹ Batson, B. N., Crosby, S. N., & Fitzpatrick, J. M. (2022, January). *JMSMA* January 2022 page 18. Mississippi Frontline Targeting Value based Care with Physician-led Care Teams. https://ejournal.msmaonline.com/publication/?m=63060&i=735364&p=20&ver=html5

¹⁰ Mehan, W. A., Shin, D., & Buch, K. (2023). Effect of provider type on overutilization of CT angiograms of the head and neck for patients presenting to the emergency department with Nonfocal neurologic symptoms. *Journal of the American College of Radiology*. https://doi.org/10.1016/j.jacr.2023.08.042

¹¹ Harry, E., Sinsky, C., Dyrbye, L. N., Makowski, M. S., Trockel, M., Tutty, M., Carlasare, L. E., West, C. P., & Shanafelt, T. D. (2020). Physician task load and the risk of burnout among US physicians in a national survey. *The Joint Commission Journal on Quality and Patient Safety*, *47*(2), 76–85. https://doi.org/10.1016/j.jcjq.2020.09.011



training, with both didactic and clinical components. As stated above, we support physician-led models of care. It is in this vein that we would like to recognize the highly specialized skill set and contributions that RTTs, RTs, and RAs make to the radiologist-led healthcare teams in radiology suites. The training and certification of these healthcare professionals (many with modality-specific certifications such as CT and MRI) and Diagnostic Medical Sonographers (also often with subspecialty certification) is highly specialized and extensive. These licensed professionals have expertise in anatomic positioning, equipment protocols, and optimizing image acquisition to maximize image quality while minimizing radiation exposure.

Cost Effectiveness of NPPS Practicing Beyond their Scope of Expertise

There are two primary arguments made by NPPs as to why they should be able to practice beyond their scope of practice. The first argument, "that it would lower healthcare costs" is factually incorrect. There have been numerous studies, some of which are referenced in this letter, which have been published in a wide variety of medical journals, that clearly show that NPPs order more unnecessary tests and overutilize specialty services. The Institute of Medicine (IOM) estimates that \$750 billion may be wasted each year in the United States on care that does not make anyone healthier. A recent study looking at emergency departments within the VA found that NPs delivering care without physician supervision increased lengths of stay by 11% and that assigning just 25% of emergency cases to NPs resulted in a net increase of \$74 million annually, in associated cost. The second argument, "that it would increase access to care, especially in rural and underserved areas" is also just not supported by workforce trends. Patients in rural areas do not benefit from an expanded scope of practice. The American Medical Association (AMA) mapped the locations of primary care physicians and nurse practitioners nationwide in 2013, 2018, 2020, and 2022, and each time physicians and nurse practitioners tend to practice in the same areas, no matter the respective state's scope of practice laws.

Conclusion

As provision of healthcare within the VA has become more complex, a fully coordinated, quality-focused, and patient-centered healthcare team is the optimal means by which veterans will receive their healthcare. Because only physicians possess the necessary educational and professional experience required to lead these complex healthcare teams, we urge the VA to maintain a physician-led approach that best serves its patients. This approach would help ensure optimal care and save money without adverse effects on access. VA previously considered the role of NPPs in radiologic procedures and appropriately decided against allowing APRNs to interpret, perform, or supervise imaging studies¹⁵; we urge VA to review the docket for that rulemaking when deciding the roles of NPPs in radiological care.

¹² Virtual Mentor. 2013;15(2):162-166. doi: 10.1001/virtualmentor.2013.15.2.msoc1-1302.

¹³ Chan, D., & Chen, Y. (2022). The productivity of professions: Evidence from the emergency department. *National Bureau of Economic Research*. https://doi.org/10.3386/w30608

¹⁴ 24, M., & Smith, T. M. (2023, May 24). *Medical training and scope of practice: 3 keys everyone must know*. American Medical Association. https://www.ama-assn.org/practice-management/scope-practice/medical-training-and-scope-practice-3-keys-everyone-must-know

¹⁵ The Federal Register- "RIN 2900–AP44–Advanced Practice Registered Nurses.". Federal Register / Vol. 81, No. 240. (2016, December 14). https://www.federalregister.gov/documents/2016/12/14/2016-29950/advanced-practice-registered-nurses#h-10



Thank you for your consideration of these particularly important issues. Should you have any questions, please feel free to contact me or ACR staff Gloria Romanelli, JD, Senior Director, Legislative and Regulatory Relations and Legal Counsel, Quality and Safety, at grownanelli@acr.org; or Dillon Harp, at dharp@acr.org.

Sincerely,

Jacqueline A. Bello, MD Chair, Board of Chancellors

Enclosed: ACR VA Comment Letter- Re: "RIN 2900-AP44-Advanced Practice Registered Nurses." 07/07/2016

APPENDIX



QUALITY IS OUR IMAGE

acr.org

James A. Brink, MD, FACR Chair, Board of Chancellors

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July 7, 2016

David J. Shulkin, MD Under Secretary for Health Department of Veterans Affairs 810 Vermont Ave. NW, Room 1068 Washington, DC 20420

Re: "RIN <u>2900-AP44</u>-Advanced Practice Registered Nurses."

The American College of Radiology (ACR) appreciates the opportunity to comment on the proposed Department of Veterans Affairs (VA) rule to expand the role of Advanced Practice Registered Nurses (APRNs). While we support the VA's efforts to address the challenges that exist within its health system, we are deeply concerned that the proposal to allow advanced practice nurses to practice independently of a physician's clinical oversight could seriously jeopardize the quality of care our veterans receive. We therefore oppose the adoption of this proposed rule.

Notwithstanding our general concerns that the proposal would undercut the physician-led, team-based models of care that best ensure efficient, safe, high quality patient care, our comments focus primarily on Section 17.415(d)(1)(i)(B) which would give Certified Nurse Practitioners (CNPs) full practice authority to: "Order, **perform, supervise**, and **interpret ... imaging studies.**" We understand that other nursing and medical specialties had advance notice of the proposed rulemaking. Indeed, the Supplementary Information accompanying the proposed rule even lists "external stakeholders" who were consulted in the development of the proposed rule. However, this list did not include any stakeholders representing the practice of medical imaging. The resultant proposed rule reflects that lack of input by medical imaging professionals, is misleading as it applies to medical imaging, and ignores critical factors that would advise against the adoption of Section 17.415(d)(1)(i)(B).

CNPs do not have the specialized education, experience or skills required to order, interpret, supervise or perform imaging studies

Without question, nurses are an essential part of physician-led health care teams. Their education, training, and experience equip them to play an integral role in patient care, but it does not substitute for intensive and specialized training that radiologists receive. Including medical school, the vast majority of physician radiologists undergo 10 years of comprehensive training beyond their undergraduate degree. The four year medical school requirement is foundational to the practice of medicine in that it entails a comprehensive understanding of the human body, its systems, functions and disease processes. While in medical school, radiologists learn anatomy, physiology, pathology, pharmacology, and pathophysiology as is required of all graduating physicians. Medical school is followed by a one year clinical internship, and a four year residency program interpreting tens of thousands of imaging studies under the supervision of a practicing radiologist. Radiology residents typically spend at least four weeks (130 lecture hours) in an intensive Radiologic Pathology Correlation Course entailing a comprehensive review of all imaging modalities, the radiologic presentation of a broad range of diseases and pathologic basis from all organ systems, with emphasis on the principles of radiologic-pathologic correlation. Most radiologists elect to continue their training with a one- or two- year post-residency fellowship program in a radiology subspecialty to hone their diagnostic skills in a radiology subspecialty.

Near the end of residency and again after beginning practice, radiology residents must pass multiple sets of board-certifying examinations. An image-rich Core Examination offered after 36 months of residency training "tests knowledge and comprehension of anatomy, pathophysiology, all aspects of diagnostic radiology, and physics concepts important for diagnostic radiology." The exam covers eighteen subspecialty and modality categories including: breast, cardiac, gastrointestinal, interventional, musculoskeletal, neuroradiology, nuclear, pediatric, reproductive/endocrinology, thoracic, urinary, vascular, computed tomography, magnetic resonance, radiography/fluoroscopy, ultrasound, physics, and safety. In addition, a portion of the Radioisotope Safety Exam (RISE), one of the requirements for Authorized User (AU) eligibility status, is included within the Core Exam. Physics questions are integrated into each category. Passing scores must be received in each category and overall in order to receive a passing result. Further, a 'maintenance of certification' process requires radiologists to commit to continuing medical education, practice quality improvement, and maintenance of certification exams to ensure continued proficiency and expertise in the rapidly-advancing field of medical imaging.

By contrast, training to become an APRN generally consists of a two- or three-year postgraduate masters or doctoral degree program. Irrespective of any additional imaging-specific training an APRN may receive, APRN education and training cannot provide the same foundational learning experience of medical school and specialized radiology residency and fellowship training. To be clear, the thorough training radiologists receive is not excessive; it is essential in equipping them to oversee/supervise and interpret imaging procedures, accurately diagnose patients, and minimize unnecessary tests. The extent to which referring physicians both outside and within the VA utilize the expertise of radiologists gives evidence to the value of radiologists' subspecialty training even with respect to other physicians. The ACR finds your proposal alarming that a VA APRN would be deemed competent to interpret images that ordering physicians in the VA commonly refer to radiology specialists. Simply put: proper interpretation of imaging exams by highly trained radiologist physicians is critical to the accurate diagnosis and treatment of disease and injury.

In addition to the requisite expertise of radiologists, registered radiologic technologists are similarly critical to the safety and quality of medical imaging. Under the supervision and in collaboration with radiologists, radiologic technologists operate imaging equipment to acquire images e.g., they "perform" medical imaging. The training and certification of Registered Radiological Technologists (many with modality specific certification such as CT and MRI) and Diagnostic Medical Sonographers (also often with subspecialty certification) is highly specialized and extensive. They have expertise in anatomic positioning, equipment protocols, and optimizing image acquisition to maximize image quality while minimizing radiation exposure. In contrast, CNP educational curricula is not tailored to the responsibilities of a radiologic technologist and cannot adequately equip them to perform highly technical procedures like conventional radiography, fluoroscopy, computed tomography, magnetic resonance imaging, nuclear medicine, vascular-interventional or bone densitometry. Utilizing insufficiently trained CNPs to perform imaging exams would endanger veterans both from the standpoint of radiation safety as well as the likelihood that poorly performed exams could lead to misdiagnosis or repeat exam necessity. (Additionally, given that CNP salaries are generally higher than RT salaries, it seems to 'fly in the face' of cost-effectiveness to utilize CNPs to perform RT job responsibilities.)

Moreover, lacking the competence to either perform or interpret imaging exams, APRNs should not be allowed to supervise diagnostic imaging. In order to ensure quality in diagnostic imaging, it is essential that the supervising professional be able to assess the quality of an image relative to the capability of the equipment and diagnostic demands, ensure diagnostic quality, and minimize unnecessary radiation exposure to the patient and personnel. In short, the safe and appropriate use of imaging (particularly given that many imaging tests require radiation safety expertise) are most appropriately conducted utilizing a physician-led team approach where expertly trained radiologists oversee radiological technologists (who are trained in radiation safety and image/acquisition techniques), along with other appropriately qualified clinicians.

Finally, research demonstrates that APRN's, when seeing a diverse population of patients with a broad range of ailments will order diagnostic imaging approximately 30% more often than a physician. The ordering and performance of unnecessary imaging can expose patients to unnecessary radiation, delayed or missed diagnoses, and pointless follow-tests, while driving up the cost of their health care. Though we believe that this could be dramatically improved with the support of "Appropriate Use Criteria" provided through clinical decision support (CDS) as will soon be required for all ordering of advanced diagnostic imaging studies (ADIS) in the Medicare population, the oversight of a team leading physician in the assessment of need for and selection of appropriate studies with radiologist consultation available is still optimal care.

Using CNPs to order, interpret, supervise or perform imaging studies will jeopardize quality of care and thwart the goal of the rulemaking to decrease wait times in the VA healthcare system

Notwithstanding the purported goal of the rulemaking to decrease wait times in the VA healthcare system, ACR believes the proposed rule, if finalized, would actually exacerbate wait time problems. As noted above, patients who utilize advance practice registered nurses for their care are 30% more likely to have an imaging test ordered than if they were seen by a physician. In addition to causing delays in diagnosis and excessive radiation exposure for the patient, the ordering of unnecessary imaging can impede the availability of expensive diagnostic imaging equipment for patients who need it as well as the time of the personnel performing and interpreting unnecessary studies.

Moreover, misdiagnosis and missed diagnosis related to interpretation by less-qualified CNP's can lead to additional follow-up testing. If a problem that should have been picked up in an imaging exam is not diagnosed, the patient is likely to be subject to additional tests (imaging and non-imaging) that may not have been required otherwise. This in turn further taxes the VA healthcare system, increases waiting times, and results in additional cost associated with unnecessary exams.

VA should thoughtfully consider federal Radiation Protection Guidance for Diagnostic and Interventional Procedures (Federal Guidance Report No. 14)

Authority to provide radiation protection guidance to federal agencies was transferred to EPA in 1970. Under this authority, Federal Guidance Report No. 14 was developed to provide federal facilities that use diagnostic and interventional x-ray equipment with recommendations for keeping radiation doses to patients as low as reasonably achievable without compromising the quality of patient care. Although not binding on any federal agency or facility, the guidance was developed by an interagency working group on medical radiation made up of medical and radiation safety professionals from the EPA, Department of Veterans Affair, Department of Defense, Department of Health and Human Services, the Occupational Safety and Health Administration. The guidance represents "best practices" for improving the safety of diagnostic and interventional imaging. As outlined in the guidance, "The goals of radiation dose management are to optimize radiation protection for patients, consistent with image quality requirements, and to keep worker radiation doses as low as reasonably achievable (ALARA)."

The 145 page guidance highlights the importance of using appropriately qualified and credentialed radiologic technologists and radiological medical practitioners, and referring practitioners who are knowledgeable in the appropriate ordering of radiologic imaging procedures and collaborate with radiologic medical practitioners.

Among its recommendations:

- "that a radiologist provide general supervision in facilities performing radiography."
- "that agencies ensure that the justification of medical exposure for an individual patient be carried out by the Referring Medical Practitioner in consultation with the Radiologic Medical Practitioner, when appropriate."²
- "Radiographic equipment should be operated under the general supervision of a physician."³
- "CT systems should only be operated by Radiologic Technologists registered by the ARRT or equivalent, preferably with advanced certification in CT, operating under the supervision of Radiological Medical Practitioners with appropriate training in CT Physics, radiation safety, and CT image interpretation."⁴

¹ Federal Guidance Report No. 14: Radiation Protection Guidance for Diagnostic and Interventional x-ray procedures (EPA-402-R-10003, November 2014, page 41.

² Id. At vii.

³ Id. At 40.

⁴ Id. At 61.

"Performance of imaging examinations by incompletely trained personnel is not justified except for emergent or life-threatening circumstances, such as natural disasters." 5

The FRN overstates CNP's authority related to medical imaging notwithstanding current state scope of practice laws

Twenty-two states⁶ and the District of Columbia allow nurse practitioners to practice completely independently; however, within the 22 states and DC, additional restrictions on practice exist within radiation protection statutes and regulations. More specifically, of the 22 states with independent practice for APRNs, eighteen⁷ states require radiographer licensure for operators of x-ray equipment. Examined in more detail, the radiation protection statutes and regulations also place restrictions on authorizing (ordering) of human exposure to radiation for medical purposes. In CO, CT, MD, RI, and WV where APRNs are granted independent practice privileges in scope of practice laws, a licensed practitioner/physician's order is required for imaging procedures but nurse practitioners do not meet the definition of licensed practitioner or physician. And of the 22 states with independent practice, in CO, CT, MN, ND and NE an APRN does NOT have supervision privileges over ancillary personnel operating fluoroscopic equipment.

Currently 40⁸ states have standards for operators of ionizing radiation equipment (such as fluoroscopic machines), meaning an APRN cannot operate ionizing radiation emitting equipment unless they are also certified as a radiographer or unless they obtain a limited x-ray operator license offered in 33⁹ states. States without radiography standards in place¹⁰ require operators to be trained prior to operation of fluoroscopic equipment.

Extending APRN practice authority in the VA to encompass imaging is not consistent with the role of APRNs in the non-VA health care sector and contravenes VHA's obligation to meet or exceed generally-accepted professional standards

The summary of the proposed rule contends, "[t]his rule would permit VA to use its health care resources more effectively and in a manner that is consistent with the role of APRNs in the non-VA health care sector." It further acknowledges that VHA has an obligation to ensure that patient care is appropriate and safe and its health care practitioners meet or exceed generally-accepted professional standards for patient care. However, not-withstanding state scope of practice laws, CNPs are not traditionally performing, supervising or interpreting imaging studies in the private sector. In addition to state scope of practice laws, medical practitioner practice can be limited by a number of other factors such as facility credentialing and privileging, the CNP's desire to perform a particular service, the CNP's belief in his/her own competence to perform the service, availability and cost of malpractice insurance, and a patient's willingness to utilize a CNP for medical care, to name just a few. The truth is: CNP's are not commonly performing, supervising, or interpreting imaging studies on a broad scale in the non-VA health care sector; as such, it is not clear

⁵ Id. At 24.

⁶ AK, AZ, CO, CT, HI, IA, ID, MD, ME, MN, MT, ND, NE, NH, NM, NV, OR, RI, VT, WA, WV, WY.

⁷ AZ, CO, CT, HI, IA, MD, ME, MN, MT, ND, NE, NM, OR, RI, VT, WA, WV, WY.

⁸ AZ, AR, CA, CO, CT, DE, FL, GA, HI, IL, IN, IA, KS, KY, LA, ME, MD, MA, MN, MS, MT, NE, NJ, NM, NY, ND, OH, OR, PA, RI, SC, TN, TX, UT, VT, VA, WA, WV, WI, WY.

⁹ AZ, AR, CA, CO, DE, FL, GA, IL, IN, IA, KY, ME, MA, MN, MS, MT, NE, NJ, NM, ND, OH, OR, PA, SC, TN, TX, UT, VT, VA, WA, WV, WI, WY.

¹⁰ AL, AK, ID, MI, MO, NV, NH, NC, OK, SD, DC.

that VA using them in such a capacity would "meet or exceed generally accepted professional standards." Even to the extent CNPs are performing, supervising or interpreting imaging studies in the private sector, patients in the private sector have the option of selecting their own health care providers and can decide whether to seek care from a CNP or a physician.

Conclusion

Veterans, and all Americans, deserve ready access to high-quality physician-led, patient-centered care, particularly in regard to medical imaging. Accurate diagnosis and treatment of disease and injury commonly depends on proper interpretation of imaging exams by highly trained radiologist physicians. The safe and appropriate performance of imaging scans, many of which involve radiation, is also dependent on expert radiological technologists with oversight of uniquely trained radiologists. We therefore urge VHA to maintain the highest quality of care and safety our nation's veterans deserve by not finalizing the proposed rule.

Sincerely,

James A. Brink, MD, FACR

Chair, ACR Board of Chancellors

James Such