

Joe Lombardo
Governor



Richard Whitley,
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Director

**DEPARTMENT OF
HEALTH AND HUMAN SERVICES**

**NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH**



Cody Phinney,
MPH
Administrator

Ihsan Azzam,
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Chief Medical
Officer

MEMORANDUM

DATE: May xx, 2024,
TO: John Pennell, Chair
State Board of Health
FROM: Cody Phinney, Administrator
Division of Public and Behavioral Health
RE: Variance Case # 762 MedSmart

Subject: Case #762, MedSmart, variance to Nevada Administrative Code (NAC) 653.400 Scope of practice for radiologist assistants and persons who hold licenses or limited licenses, section 653.400(1)(c).

Staff Review

For the reasons stated below and with the conditions specified, DPBH staff recommend the State Board of Health approve Case #762, MedSmart, request for a variance to NAC 653.400(1)(c).

NEVADA ADMINISTRATIVE CODE (NAC) 653.400(1)(c) states, in relevant part,

1. For the purpose of defining the scope of practice pursuant to paragraph (b) of subsection 1 of NRS 653.460:

[...]

(c) A person who holds a license to engage in radiologic imaging issued pursuant to NRS 653.310 to 653.910, inclusive:

(1) May, while under the supervision of a licensed practitioner, if applicable, use ionizing radiation for diagnostic purposes or to visualize a medical condition by applying the ionizing radiation emitted from X-ray machines to any part of the human body.

(2) May, in conjunction with the study of radiation, administer contrast agents and related drugs for diagnostic purposes.

(3) May perform diagnostic radiographic and noninterpretive fluoroscopic procedures, as prescribed by a licensed practitioner, and may assist the licensed practitioner with fluoroscopic and specialized radiologic procedures.

(4) Shall perform his or her duties in accordance with the Standards of Ethics adopted by reference in subsection 2 of NAC 653.090.

Summary of Variance Request:

Variance applicant MedSmart ("Applicant") submitted a request for variance from the requirements of NAC 653.400(1)(c) on April 22, 2024. The Applicant is requesting authorization to perform remote Computed Tomography (CT) imaging. Remote CT is a new technology that allows an offsite technologist to remotely initiate CT imaging. The remote CT is accomplished using visual and vocal communications between the CT technologist, patient, and an assisting person at the facility.

Persons licensed to perform radiological imaging include radiological technologist (RT), Radiation Therapist, and Nuclear Medicine Technologists (NMT). Throughout this memo, these persons will be referred to as RTs or assisting technologists. Persons licensed to perform CT have additional training and certification specific to CT. Throughout this memo, persons licensed to perform CT will be referred to as CT technologists or remote technologists. This variance proposes to use a CT technologist at the remote location and an RT as the assisting person at the site where the patient is being imaged. A variance is needed to expand the scope of practice for RTs in NAC 653.400 to include assisting with remote CT imaging.

Intent of Regulation:

NAC 653.400(1)(c) defines the scope of practice for persons licensed to engage in radiologic imaging to ensure technologist have adequate training and qualifications to safely image patients and to protect themselves, other workers, and the public from radiation. Remote CT is a new technology which was not in use when NAC Chapter 653 was promulgated and therefore not included in the current regulations. The Applicant is requesting a variance to include within the scope of practice for RTs the duties and tasks necessary to assist a CT technologist with remote imaging. The additional scope of practice for assisting with remote CT include those tasks that must be performed at the imaging site including administering CT contrast, positioning the patient, operating the CT console under the direction of the remote CT technologist, responding to emergency situations, and ensuring the radiation safety of the patient and other workers. Licensed RTs already perform these duties for other modalities of radiologic imaging but not for CT. CT has specific training requirements that are in addition to the training required for other radiation producing machines. To ensure the intent of the regulation is met, the assisting technologist will be trained to the same standards as a certified CT technologist for the tasks they perform.

Degree of risk to public health or safety:

Not having a CT technologist at the site with the patient could result in excessive

radiation exposure to a patient, other workers, and members of the public. And adequately trained persons would not be available at the imaging site to handle emergencies should one arise during a CT imaging procedure. These risks can be mitigated by having at the imaging location a licensed RT who has additional training to competently assist with CT imaging and emergency situations.

Background Information:

The state licenses around 3100 persons for radiological imaging and of these, 723 persons are licensed to perform CT. The State is experiencing a shortage of imaging technologists across all modalities, but especially for CT and Magnetic Resonance Imaging (MRI) technologists. Remote CT imaging enables a CT technologist to provide services for multiple medical offices from a central location thereby helping to provide CT imaging services to medical facilities who are unable to obtain the services of a CT technologist.

Remote CT is a new technology that allows an offsite technologist to remotely initiate CT imaging. The remote CT is accomplished using visual and vocal communications between the CT technologist, patient, and an assisting person at the imaging facility. The program reviewed information on the Phillips Radiological Command Center (ROCC) provided by the applicant. The ROCC is a system that provides a real-time virtual collaboration platform that connects the CT technologist at the remote location with the assisting technologists at imaging locations and other healthcare professionals such as radiologists, which may be at different locations. The platform is safe, secure, has multi-factor authentication, works with multiple brands of CT systems, and provides audit trails of all interactions. Making access to imaging results across more locations could help radiology departments and radiologists meet patient and workload demands. Collaboration among medical facilities also has the potential for increasing patient access to CT services. The system also has the ability to perform remote MRI. Nevada does not license or inspect MRI systems but integration of CT with MRI into the same system may make MRI services more accessible to patients and add to the success of this technology.

Persons licensed to perform radiological imaging must be certified by the American Registry of Radiologic Technologists (ARRT), as a Radiography Technologist (RT). To perform CT imaging, RTs must complete additional training to become certified in CT. The variance proposes to use a CT technologist at the remote location and a RT technologist with additional training in CT as the assisting person at the site where the patient is being imaged. The variance is needed to expand the scope of practice for RTs in NAC 653.400(1)(c) to include assisting with remote CT imaging.

The ARRT has established structured educational and clinical experience requirements for CT certification, which includes a list of tasks that CT technologists perform. To ensure patients are imaged by qualified and competent persons, the assisting RT will be trained to the ARRT educational and clinical training requirements for CT technologist for the specific tasks they perform. The training will incorporate appropriate sections of the CT Curriculum established by the American Society of Radiologic Technologists (ASRT). The RT is not required to be trained on all aspects of CT, just the tasks they perform. The training can be developed and provided by the Applicant, a contractor, consultant, manufacturer, or educational institution, provided the level of training is commensurate with the RTs duties and responsibilities. Persons licensed as Nuclear

Medicine Technologist (NMT), Radiation Therapist, and grandfathered CT technologist can also assist with remote CT provided they complete the licensee's training described above.

The Applicant has agreed to develop, document, and maintain a radiation safety program to ensure the safe use of this new technology. The program elements of the radiation safety program are in attachment A. The Applicant's commitment to develop, document, and maintain a radiation safety program is in Attachment B. Approval of the variance with the above conditions will minimize the risk to public health and safety to the extent practical.

Exceptional and undue hardship:

Strict application of 653.400(1)(c) requires the Applicant to have a licensed CT technologist at each imaging site, which is restricting medical provider's ability to image and care for patients. The State is experiencing a shortage of imaging technologists across all modalities, but especially for CT. The state licenses around 3100 persons to perform radiological imaging and of these 723 are licensed to perform CT. The shortage of licensed CT technologist is affecting patients, medical care providers, and hospital emergency rooms. Patients who require a CT exam must schedule the CT exam weeks in advance or go to a hospital emergency room. This hinders a medical provider's ability to provide patient care, increases the patients cost for care, and places an additional burden on emergency rooms. Remote CT can help alleviate the impact of this shortage because it enables one CT technologist to provide services for multiple medical providers from a central location.

Approval of this variance is not expected to adversely affect other persons subject to the regulations because DPBH would support variances from other registrants who would benefit from this technology under the same conditions.

Impairment to the purpose of the regulation:

Approval of this variance will not impair the purpose of the regulation because a CT technologist at the remote location will be fully participating throughout the imaging process thorough vocal and visual communications and the assisting RT will be trained to the same level as a CT technologist for the specific tasks they perform at the imaging location. The Applicant will develop, document, and maintain a radiation safety program specific to remote CT that includes adequate controls to ensure the safety of patients, other workers, and members of the public.

Staff Recommendation

DPBH staff recommend the State Board of Health approve Case #999, MedSmart, a request for variance to NAC 653.400(1)(c) for a period of 10 years with the condition that the Applicant will implement the commitments in Attachment B.

Public Comments:

Notice of the hearing is scheduled to be posted on the Division of Public & Behavioral

Health website at <http://dphh.nv.gov/Boards/BOH/Meetings/Meetings/> and at the 4150 Technology Way Office in Carson City, NV 89706 before 9:00 am on May 23, 2024. The Division of Public & Behavioral Health is not aware of any objections to this variance by any local authorities, and no public comments have been received to date.

Presenter:

John Follette, Manager Radiation Control
Program Division of Public and Behavioral Health
Bureau Health Protection and Preparedness

Attachments:

- A. Radiation Safety Program Elements for Remote Computed Tomography
- B. Applicants Commitments

DRAFT

Attachment A

Radiation Safety Program Elements for Remote Computed Tomography

The Applicant will develop, document, and maintain a radiation safety program with the following provisions:

Use only remote CT systems and components that can adequately protect patient information and to establish policies and procedures for ensuring patient information is protected at the imaging facility, remote imaging locations, and locations where other members of the medical team will be viewing or accessing patient information. Remote CT systems or components must be approved by the Food and Drug Administration (FDA) prior to use, when approval is required by the FDA.

Maintain a list of the remote locations and associated imaging sites. The list is to contain the name of the facility, location, and a contact person.

The assisting technologist will be licensed to perform radiological imaging as radiological technologists (RT), Radiation Therapist, Nuclear Medicine Technologists (NMT) or to perform CT. The remote CT technologist must be licensed by the State of Nevada to perform CT.

Define the roles and responsibilities for the remote CT technologist and the assisting technologist.

Identify the tasks performed by the assisting and remote technologists and develop procedures for these tasks.

Train the assisting technologist to the ARRT educational and clinical training requirements for CT technologist for the specific tasks they perform. The training will incorporate appropriate sections of the CT Curriculum established by the American Society of Radiologic Technologists (ASRT).

Ensure the assisting technologist completes annual radiation safety training related to their CT responsibilities.

Ensure the assisting technologist maintains constant surveillance of the patient throughout the CT imaging procedure and performs only one CT imaging procedure at a time.

Ensure remote CT will not be performed if communications (verbal and virtual) or connectivity between the remote site and the imaging facility is not functioning properly or is otherwise unreliable.

Develop procedures for responding to emergencies and situations where there may be a loss of connectivity between the remote site and the imaging facility.

Perform checks of the communication system (verbal and visual) and the functionality and connectivity between the remote location and the imaging facility prior to initiating each CT imaging procedure.

Ensure the remote CT technologist maintains constant surveillance via vocal and visual communications throughout a CT imaging procedure and performs only one CT imaging procedure at a time.

Ensure the CT technologists at the remote locations are licensed in the State of Nevada to perform CT.

Follow all of the manufacturer's recommendations for servicing, testing, and maintaining both the CT and remote CT systems.

Develop policies and procedures to ensure adequate management oversight of remote operations, including audits to evaluate the effectiveness and safety of the remote CT operations, observations of work being performed at both the imaging facility and the remote location, and processes to identify, track, investigate, and implement corrective actions for incidents where CT exams are incomplete or repeated.

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Attachment B

Applicant Commitments for Remote Computed Tomography

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BEFORE THE STATE BOARD OF
HEALTH

IN THE MATTER OF

MEDSMART

VARIANCE REQUEST; CASE #762

The Nevada State Board of Health ("Board"), having considered the application of MedSmart for a variance and all other related documents submitted in support of the application in the above referenced matter, makes the following Findings of Fact, Conclusion of Law and Decision to APPROVE Variance Request #762.

FINDINGS OF FACT

1. The Division of Public and Behavioral Health received a request from MedSmart, on April 22, 2024, for a variance from Nevada Administrative Code (NAC) 653.400(1)(c) which states, in relevant part:
 1. For the purpose of defining the scope of practice pursuant to paragraph (b) of subsection 1 of NRS 653.460:
[. . .]
(c) A person who holds a license to engage in radiologic imaging issued pursuant to NRS 653.310 to 653.910, inclusive:
 - (1) May, while under the supervision of a licensed practitioner, if applicable, use ionizing radiation for diagnostic purposes or to visualize a medical condition by applying the ionizing radiation emitted from X-ray machines to any part of the human body.
 - (2) May, in conjunction with the study of radiation, administer contrast agents and related drugs for diagnostic purposes.
 - (3) May perform diagnostic radiographic and noninterpretive fluoroscopic procedures, as prescribed by a licensed practitioner, and may assist the licensed practitioner with fluoroscopic and specialized radiologic procedures.
 - (4) Shall perform his or her duties in accordance with the Standards of Ethics adopted by reference in subsection 2 of NAC 653.090.
2. The Board of Health considered Variance Request #762 at the June 7, 2024, meeting of The Board of Health. A representative of the Division of Public and Behavioral Health was present to present staff recommendations and answer Board questions.

3. The Variance as presented requests a variance to NAC 653.400(1)(c), to allow the use of a person licensed to perform Computed Tomography (CT) imaging at a remote site, assisted by a person licensed to perform radiological imaging at the site where the patient is being imaged, so long as the person licensed to perform radiological imaging has undergone additional training to the same standards as a certified CT technologist for the tasks they perform.

CONCLUSIONS OF LAW

1. This matter is properly before the Nevada State Board of Health pursuant to Nevada Revised Statutes (NRS) 439.200 and determination of the matter on the merits is properly within the subject matter jurisdiction of the Board.
2. NRS 439.200 provides:

The State Board of Health may grant a variance from the requirements of a regulation if it finds that:
 - (a) Strict application of that regulation would result in exceptional and undue hardship to the person requesting the variance; and
 - (b) The variance, if granted would not:
 - (1) Cause substantial detriment to the public welfare; or
 - (2) Impair substantially the purpose of the regulation.
3. The Board finds that strict application of the regulation would result in an exceptional and undue hardship.
4. The Board finds that granting this variance would not impair the purpose of the regulation or cause a substantial detriment to the public welfare.

ORDER

Based upon the foregoing Findings of Fact and Conclusions of Law, and good cause appearing, therefore, IT IS HEREBY ORDERED, ADJUDGED, AND DECREED that the variance from NAC 653(1)(c) is APPROVED as presented; specifically, MedSmart will be allowed to perform remote Computer Tomography (CT) for a period of 10 years after the date of this approval provided MedSmart complies with the radiation protection commitments submitted in support of this variance.

DATED this 7th day of June 2024

Cody Phinney, MPH, Administrator
Division of Public and Behavioral Health
Department of Health and Human Services