

## STAFFING

1. **REASON FOR ISSUE:** To revise the Department of Veterans Affairs (VA) qualification standard for Therapeutic Radiologic Technologist (Dosimetrist), General Schedule (GS)-0648, appointed under 38 U.S.C. § 7401(3), Appointments in Veterans Health Administration and 38 U.S.C. § 7405(a)(1)(B), Temporary full-time appointments, part-time appointments, and without-compensation appointments.
2. **SUMMARY OF CONTENTS/MAJOR CHANGES:** This revised qualification standard updates the Therapeutic Radiologic Technologist (Dosimetrist) qualification requirements under VA's title 38 hybrid excepted service employment system according to the authority established under P.L. 111-163, Caregivers and Veterans Omnibus Health Services Act of 2010. VA Secretary has authority under 38 U.S.C. § 7402 to prescribe qualifications for occupations identified in or established under 38 U.S.C. § 7401(3), Appointments in Veterans Health Administration and 38 U.S.C. § 7405(a)(1)(B), Temporary full-time appointments, part-time appointments and without-compensation appointments. The revised standard is effective on the date of this publication. This qualification standard is maintained on the [Office of the Chief Human Capital Officer website](#) and [Office of the Chief Human Capital Officer \(OCHCO\) \(va.gov\)](#). Significant changes include updating the basic requirement for education and adding an exception for education for graduates of dosimetry programs who graduated before January 1, 2017.
3. **RESPONSIBLE OFFICE:** Office of Human Resources and Administration/ Operations, Security, and Preparedness (HRA/OSP) (006), Office of the Chief Human Capital Officer (OCHCO) (05), Recruitment and Placement Policy Service (059).
4. **RELATED DIRECTIVE:** [VA Directive 5005, Staffing, April 15, 2002](#).
5. **RELATED HANDBOOK:** VA Handbook 5005, Staffing, Part II, Appendix G17.
5. **RESCISSIONS:** VA Handbook 5005, Part II, Appendix G66, "Therapeutic Radiologic Technologist (Dosimetrist) Qualification Standard" dated January 15, 2021.

**BY DIRECTION OF THE SECRETARY  
OF VETERANS AFFAIRS:**

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Cassandra M. Law  
Assistant Secretary for  
Human Resources and Administration/  
Operations, Security, and Preparedness

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**THERAPEUTIC RADIOLOGIC TECHNOLOGIST (DOSIMETRIST)  
QUALIFICATION STANDARD  
GS-0648  
Veterans Health Administration**

- 1. COVERAGE.** The following are requirements for appointment or placement as a General Schedule (GS)-0648, Therapeutic Radiologic Technologist (Dosimetrist), referred to as “Medical Dosimetrist” in this standard, in Veterans Health Administration (VHA). These requirements apply to all VHA Medical Dosimetrists in the GS 0648 series. A Medical Dosimetrist is a member of the radiation oncology team working collaboratively with the Medical Physicist and Radiation Oncologist meeting cancer patients needs through radiation therapy. Medical Dosimetrists have an in-depth knowledge of high dose ionizing radiation and clinical relevance of radiation oncology treatment machines and equipment. Medical Dosimetrists possess an in-depth knowledge of all medical imaging modalities and are cognizant of procedures commonly used in brachytherapy. Medical Dosimetrists have the background necessary to generate radiation dose distributions and dose calculations to support the Medical Physicist and Radiation Oncologist. This appendix applies to Medical Dosimetrists who are certified in medical dosimetry and serving in that capacity as evidenced by titling and duties outlined in the functional statement. Former Appendix G26 outlines the qualification standards for Therapeutic Radiologic Technologists who are certified in therapeutic radiologic technology by the American Registry of Radiologic Technology (ARRT)(T) and only serving in that capacity.
- 2. AUTHORITIES.**
  - a. [P.L. 111-163, Caregivers and Veterans Omnibus Health Services Act of 2010.](#)
  - b. [38 U.S.C. § 7401, Appointments in Veterans Health Administration.](#)
  - c. [38 U.S.C § 7402, Qualifications of appointees.](#)
  - d. [38 U.S.C § 7403, Period of appointments; promotions.](#)
  - e. [38 U.S.C § 7405, Temporary full-time appointments, part-time appointments, and without-compensation appointments.](#)
  - f. [38 U.S.C § 7407, Administrative provisions for §§ 7505 and 7406 appointments.](#)
- 3. DEFINITIONS.**
  - a. **Appointing Official.** The Human Resources (HR) Officer is delegated appointing authority to process and authenticate notifications of personnel actions and authority to effect management-approved employment actions on behalf of officials, employees, and facilities for which service is provided.

- b. **Approving Official.** The Veterans Integrated Service Network Director, Facility Director or designee is the approving official and will determine whether to approve or disapprove the appointment of employees in hybrid occupations.
  - c. **Experience.**
    - (1) **Creditable Experience.** To be creditable, experience must be equivalent to at least the next lower grade level and directly related to the position being filled. It must demonstrate possession of the knowledge, skills, abilities, and other characteristics associated with current dosimetry standard operating procedures. For positions at or above the full performance level, the experience must demonstrate the use of knowledge, skills, and abilities as a Medical Dosimetrist and may be paid or non-paid employment.
    - (2) **Part-Time Experience.** Part-time experience is creditable according to its relationship to a full-time workweek. For example, an individual employed 20 hours per week, or on a half-time basis, would receive one full-time work week of credit for each two weeks of service.
    - (3) **Quality of Experience.** Qualifying experience must be comparable to Medical Dosimetrist experience at the next lower grade level of the position being filled. For all assignments above the full performance level, the higher-level duties must consist of significant scope, administrative independence, complexity and range of variety as described in this standard at the specified grade level and be performed by the incumbent at least 25% of the time.
  - d. **Journey Level.** The full performance level for this qualification standard is the GS-11 grade level.
  - e. **Medical Dosimetry Professional.** Radiation therapy planning is the pretreatment process that allows radiation oncologists to model, predict, and optimize the total dose of radiation to target/tumor volumes and minimize dose to critical normal surrounding tissues before delivery of the prescribed radiation treatment. They possess an in-depth knowledge of all medical imaging modalities, are cognizant of procedures commonly used in brachytherapy, and have the education and expertise necessary to independently generate radiation dose distributions and dose calculations in collaboration with the Medical Physicist and Radiation Oncologist. Medical Dosimetrists with the appropriate current ARRT(T) certification may, as needed, independently perform therapeutic radiologic duties as part of the radiation oncology team. This ARRT(T) certification requirement applies to all grade levels for which applicable therapeutic radiologic duties may be performed by the Medical Dosimetrist.
4. **BASIC REQUIREMENTS.** To qualify for appointment to this position, all applicants must possess the following:
- a. **Citizenship.** Be a citizen of the United States (U.S.). Non-citizens may be appointed when it is not possible to recruit qualified citizens according to 38 U.S.C. § 7407(a).

**b. Education.**

- (1) Effective January 1, 2017, candidates are required to hold a minimum of a bachelor's degree and graduate from a medical dosimetry program of at least 12 months in duration. The medical dosimetry program must be accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), or other accrediting bodies recognized by the U.S. Department of Education. JRCERT is the accrediting agency for the medical dosimetry programs recognized by the U.S. Department of Education.
- (2) **Exception.** Candidates who graduated prior to January 1, 2017, are considered to have met the basic education requirement provided they meet all Medical Dosimetrist Certification Board (MDCB) requirements and are in good standing.

**c. Certification.**

- (1) **Certification.** All applicants must be certified in medical dosimetry by the MDCB. Certified Medical Dosimetry (CMD) is the recognized credential for Medical Dosimetrists.

**NOTE:** CMDs who perform therapeutic radiologic technologist duties must also possess ARRT(T) certification and be assigned to a functional statement that combines both types of work.

**NOTE:** The Consumer-Patient Radiation Health and Safety Act of 1981, P.L. 97-35 requires persons who administer Therapeutic Radiological procedures meet the credentialing standards in 42 C.F.R. § 75. They must have completed an educational program meeting or exceeding the standards described in that regulation and be accredited by an organization recognized by the U.S. Department of Education or be a Radiation Therapist certified in medical dosimetry.

- (2) **Exception for non-certified Medical Dosimetrists.**
  - (a) Non-certified applicants who otherwise meet the eligibility requirements for Medical Dosimetrist certification may be given a temporary appointment as a graduate under 38 U.S.C. § 7405(a)(1)(B).
  - (b) Non-certified individuals may only provide care under the supervision of a certified Medical Dosimetrist at or above the full performance level.
  - (c) Non-certified individuals may only be appointed at the entry level and may not be promoted/converted until certification is obtained.
  - (d) Temporary appointments of non-certified Medical Dosimetrists may not be extended beyond two years or converted to a new temporary appointment.

- (3) **Failure to Obtain Certification.** In all cases, uncertified Medical Dosimetrists must actively pursue meeting the requirements for certification starting from the date of their appointment. At the time of appointment, the Medical Dosimetrist's supervisor will provide the Medical Dosimetrist with the written requirements for certification, including the time by which the certification must be obtained and the consequences for not becoming certified by the deadline. Failure to obtain certification during this period may result in termination of employment.
  - (4) **Loss of Credential.** In collaboration with HR office staff, management officials must immediately relieve employees who fail to maintain the required certification of the duties and responsibilities associated with this occupation, which may also result in separation from employment.
  - (5) HR office staff must appoint Medical Dosimetrists according to the provisions in VA Handbook 5005, Part II, Chapter 3, Section B, who have or have ever had their Medical Dosimetrist certification revoked, suspended, denied, restricted, limited, or issued/placed in a probationary status.
- d. **Grandfathering Provision.** Employees in VHA in this occupation, under a permanent, appropriate, and legal placement on the effective date of the qualification standard, are considered to have met all qualification requirements for the grade and/or assignment held, including positive education and certification that are part of the basic requirements of the occupation. For employees who do not meet all the basic requirements required in this standard, but who met the qualifications applicable to the position at the time they were appointed, the following provisions apply:
- (1) Employees may be reassigned, promoted up to and including the full performance (journey) level or changed to a lower grade within the occupation but may not be promoted beyond the journey level or placed in supervisory or managerial positions.
  - (2) Employees in an occupation requiring certification only at higher grade levels must meet the certification requirement before they can be promoted to those higher grade levels.
  - (3) Employees who are appointed on a temporary basis prior to the effective date of the qualification standard may not have their temporary appointment extended or be reappointed on a temporary or permanent basis until they fully meet the standard's basic requirements.
  - (4) Employees retained in this occupation under this provision who subsequently leave this occupation lose protected status and must meet the full VA qualification standard requirements in effect at the time of re-entry to the occupation.
  - (5) Employees initially grandfathered into this occupation who subsequently obtain additional education and/or certification that meet all the basic requirements of

this qualification standard must maintain the required credentials as a condition of employment.

**NOTE:** This provision is not intended to regularize appointments/ placements.

- e. **Foreign Education.** To be creditable, education completed outside the U.S. must be deemed at least equivalent to that gained in a conventional U.S. program by a private organization specializing in the interpretation of foreign educational credentials. Foreign equivalency evaluation from The Foundation for International Services, Inc. or the International Education Research Foundation is required. Foreign equivalency documentation from any other organization will not be considered.
  - f. **Physical Requirements.** See [VA Directive and Handbook 5019, Employee Occupational Health Service](#).
  - g. **English Language Proficiency.** Medical Dosimetrists must be proficient in spoken and written English. See 38 U.S.C. § 7403(f).
5. **OFFICIAL POSITION TITLES.** All official documents relating to a position (e.g., functional statements and personnel actions) must use the approved official title and grade level as described below. For recruitment purposes, HR offices will use the organizational title Medical Dosimetrist in the job opportunity announcement. See [VA Handbook 5003](#) , for information on the use of official titles and organizational titles.
- a. Therapeutic Radiologic Technologist (Dosimetrist), GS-09.
  - b. Therapeutic Radiologic Technologist (Dosimetrist), GS-10.
  - c. Therapeutic Radiologic Technologist (Dosimetrist), GS-11.
  - d. Therapeutic Radiologic Technologist (Dosimetrist), GS-12.
  - e. Lead Therapeutic Radiologic Technologist (Dosimetrist), GS-12.
6. **GRADE DETERMINATIONS.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates:
- a. **Medical Dosimetrist, GS-09.**
    - (1) **Experience.** None beyond the basic requirements.
    - (2) **Assignment.** Employees at this grade level serve as entry level Medical Dosimetrists in a developmental level position. It is expected they have received the additional and specialized training necessary to perform technical tasks independently with general oversight and exercise independent judgement. However, they will generally receive guidance from more experienced staff members for more complex patient treatment planning and may require some direct supervision as needed in any assignment in medical dosimetry. Medical Dosimetrists at this level have extensive training and knowledge in computer

treatment planning, cross-sectional anatomy, and image fusion; dose tolerances will be used to develop treatment plans. Candidates must be able to use effective communication skills to follow the radiation oncologist's directives and/or prescriptions.

- (3) **Demonstrated Knowledge, Skills, and Abilities (KSA).** None beyond the basic requirements.

**b. Medical Dosimetrist, GS-10.**

- (1) **Experience.** At least one year of experience equivalent to the next lower grade level directly related to the position being filled.
- (2) **Assignment.** This is a developmental position. Employees at this level are substantially independently function as staff Medical Dosimetrists and are able to carry out most procedures as Medical Dosimetrists under general supervision.
- (3) **Demonstrated Knowledge, Skills, and Abilities.** The candidate must demonstrate the following technical KSAs:
  - (a) Skill in computer treatment planning to design patient treatment plans with awareness to dose limitations to critical structures following the prescription outlined by the radiation oncologist.
  - (b) Ability to perform control procedures for radiation therapy including weekly chart checks for data accuracy and completion and quality assurance procedures on the treatment planning computer(s).
  - (c) Ability to assist in the preparation and design of custom molds, boluses, templates, and compensating devices.
  - (d) Ability to assist in computer tomography (CT) scans for tumor localization in radiation treatment planning to perform accurate patient contours for transfer to treatment planning devices.

**c. Medical Dosimetrist, GS-11.**

- (1) **Experience.** At this level, candidates must have at least one year of creditable experience equivalent to the next lower grade level directly related to the position to be filled and demonstrate the knowledge, skills and abilities needed to provide services as a staff dosimetrist.
- (2) **Assignment.** Medical Dosimetrists at this level are at the full performance level and are fully functional and carry out their assigned task independently in all areas of medical dosimetry. They are responsible for developing accurate and deliverable complex treatment plans and image importing for fusion during the planning process. Medical Dosimetrists will contour critical structures and tumor



volumes. They provide input of radiation safety practices, quality standards and abide by all governing bodies and standard operating procedures.

- (3) **Demonstrated Knowledge, Skills, and Abilities.** The candidate must demonstrate the following technical KSAs:
- (a) Knowledge of radiation safety practices, including reporting discrepancies and ensuring compliance with regulatory requirements, quality standards, accrediting agencies, policies, and standard operating procedures.
  - (b) Skill at importing diagnostic imaging studies from multiple media types and image fusion using CT, magnetic resonance imaging (MRI) and positron emission tomography (PET), and positron emission tomography-computed tomography (PET CT) for complex treatment planning.
  - (c) Skill in using computer treatment software to develop an accurate deliverable complex plan such as 3D conformal, intensity-modulated radiation therapy, Volumetric Arc Therapy and stereotactic techniques, dose limitation to critical structures, Record and Verify software, and quality assurance (QA) methods following the directive outlined by the radiation oncologist.
  - (d) Ability to effectively communicate all aspects of the directive and treatment planning process with the radiation oncology team to solve complex clinical treatment challenges.
  - (e) Ability to delineate and accurately contour critical structures and tumor volumes used to develop a deliverable treatment plan through an in-depth knowledge of cross-sectional anatomy and all diagnostic imaging modalities.
  - (f) Ability to provide input or assist with the use or necessity of ancillary treatment devices, patient immobilization techniques and other patient positioning techniques as needed for simulation or treatment.
  - (g) Ability to apply new developments, planning techniques, and technology in the field of radiation therapy such, as but not limited to, treatment planning system QA.

d. **Medical Dosimetrist, GS-12.**

- (1) **Experience.** At this level, candidates must possess at least one year of creditable experience equivalent to the next lower grade level that demonstrates the core competencies described at that level and must fully meet the KSAs.
- (2) **Assignment.** For all assignments above the full performance level, the higher-level duties must consist of significant scope, complexity (difficulty) and range of variety, and be performed by the incumbent at least 25% of the time. At the

advanced level, Medical Dosimetrists are fully functional dosimetrists with knowledge and experience applying an advanced level of treatment planning and dosimetry procedures. Medical Dosimetrists serve as integral team members for complex treatment planning, QA verifications, weekly chart checks and ability to train on all aspects of the Record and Verify System. Medical Dosimetrists train staff, evaluate workload, and ensure compliance with all necessary governing bodies and standard operation procedures.

- (3) **Demonstrated Knowledge, Skills, and Abilities.** In addition, the candidate must demonstrate the following technical KSAs:
- (a) Knowledge of the care and use of radioactive resources for implementation and treatment delivery.
  - (b) Skill at effective communication and leadership as demonstrated by providing orientation and training for staff, providing input for yearly appraisals, directing progress and coordination of workload, and ensuring compliance with standard operating procedures and directives to provide continuity of care.
  - (c) Skill in providing guidance and expertise related to all aspects of the treatment planning process.
  - (d) Skill to independently perform complex treatment procedures as evidenced by completing tasks such as developing and troubleshooting highly complex isodose treatment plans delineating critical structures and tumor volumes, performing weekly chart checks, performing QA verifications and providing training on all aspects of the Record and Verify System such as Mosaic or Aria.
  - (e) Ability to resolve complex physical and geometric errors in radiation equipment, simulation procedures and treatment delivery implementation.
  - (f) Ability to follow protocols including, but not limited to developing and implementing policies and standard operating procedures, participating in research programs, ensuring compliance with the radiation safety office, national program office, and accrediting agencies, and following established quality standard measures.
  - (g) Ability to apply a broad range of specific methods of radiation measurements including, but not limited to, diode, ion chamber, thermoluminescent dosimeter, or film measurement as directed by a qualified Medical Physicist and perform or assist with the QA procedures as directed by a qualified Medical Physicist.

e. **Lead Medical Dosimetrist, GS-12.**

- (1) **Experience.** At this level, candidates must possess at least one year of creditable experience equivalent to the next lower grade level that demonstrates the core competencies described at that level and must fully meet the KSAs at that level.
- (2) **Assignment.** For all assignments above the full performance level, the higher-level duties must consist of significant scope, complexity and range of variety and be performed by the incumbent at least 25% of the time. In this assignment, the Medical Dosimetrist functions as a lead dosimetrist with administrative and professional responsibility for planning, directing, and distributing the workload of dosimetrists up to the GS-11 level, including support staff in the medical center's therapeutic radiologic technology program. In addition, the incumbent serves as the professional mentor, trainer and coach for the unit. Lead Medical Dosimetrists develop and update technical policy and procedure manuals. They provide assistance and input on equipment use and resolution of machine issues. Lead Medical Dosimetrist also ensure dosimetric protocols are up to date to reflect current standards of care, radiation safety and quality management. They ensure Medical Dosimetrists comply with accrediting and regulating bodies. Lead Medical Dosimetrists also review staffing levels and work procedures to influence resource allocation decisions made at the executive level.
- (3) **Demonstrated Knowledge, Skills, and Abilities.** Candidates must demonstrate the following KSAs:
  - (a) Ability to perform lead duties such as orientation and training for staff, provide input for yearly appraisals, direct progress and coordinate dosimetric work.
  - (b) Ability to develop the Quality Improvement Program by evaluating, establishing and implementing departmental policies, standard operating procedures and department compliance with the national program office, radiation accrediting agencies, hospital and outside governing body standards.
  - (c) Ability to solve complex technical problems by instructing and providing oversight to lower-level Medical Dosimetrists and trainees with regard to treatment planning, using the Record and Verify System (or other similar systems), using newly acquired equipment and other devices and products within the service.
  - (d) Ability to successfully communicate with the radiation oncology team and other internal and external customers to manage patients' needs.
  - (e) Ability to provide broad oversight and assist in the application of specific methods of patient and/or treatment planning as directed by Medical Physicists.

## 7. DEVIATIONS.

- a. The establishment of a position and subsequent placement of an individual in a grade or assignment not described in the hybrid title 38 qualification standard must be approved by the Under Secretary for Health or designee prior to placement.
- b. Under no circumstance will educational requirements necessary to meet basic qualifications or assignment specific educational requirements be waived.
- c. Under no circumstance will the credential (i.e., license, certification, and/or registration) requirements to meet basic qualifications or assignment specific credentials be waived unless an exception provision is provided in the qualification standard.
- d. In rare and unusual circumstance(s), the Under Secretary for Health or designee may approve requests for reasonable deviations to the grade determination requirements for an individual whose composite record of experience, accomplishments, performance, and qualifications warrant such action based on demonstrated competence to meet the requirements of the grade and/or assignment.

**RESPONSIBLE OFFICE:** Human Resources and Administration/Operations, Security and Preparedness (HRA/OSP) (006), Office of the Chief Human Capital Officer (OCHCO) (05), Recruitment and Placement Policy Service (059)