

STAFFING

- 1. REASON FOR ISSUE:** To establish the Department of Veterans Affairs (VA) qualification standard for Diagnostic Medical Physicist (DMP), GS-0601, 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 establishes the Diagnostic Medical Physicist occupation 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. The Secretary for the Department of Veterans Affairs 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 new 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 \(OCHCO\) \(va.gov\)](#).
- 3. 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).
- 4. RELATED DIRECTIVE:** [VA Directive 5005, Staffing, April 15, 2002.](#)
- 5. RELATED HANDBOOK:** VA Handbook 5005, Staffing, Part II, Appendix G17.
- 6. RESCISSION:** Not applicable.

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

/s/
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Assistant Secretary for
Human Resources and Administration/
Operations, Security, and Preparedness

**DIAGNOSTIC MEDICAL PHYSICIST
QUALIFICATION STANDARD
GS-0601
Veterans Health Administration**

1. **COVERAGE.** The following are requirements for appointment and placement as a Diagnostic Medical Physicist (DMP) in the Veterans Health Administration (VHA). These requirements apply to all DMPs in the General Schedule (GS) 0601 series. Scientific and technological advancements in medicine necessitate the need to integrate a variety of DMP skills including the clinical applications for detection and treatment of disease, quality assurance (QA), and radiation safety. DMPs are certified professionals who apply physics and technology to diagnostic and interventional imaging and QA requirements for the accreditation of health care facilities. DMPs are board certified in a subspecialty based on the specialized skills required for the assignment.
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. **Accrediting Body.** An accrediting body is a professional organization such as the American College of Radiology (ACR), or commission, such as The Joint Commission (TJC), with authority to accredit a health care facility or system or diagnostic imaging service (for example, mammography or computed tomography (CT)) at a facility and/or an educational institution or program.
 - b. **Appointing Official.** The Human Resources (HR) Officer is the delegated appointing authority to process and authenticate notifications of personnel actions and to effect management-approved employment actions on behalf of officials, employees, and facilities for which service is provided.
 - c. **Approving Official.** The Veterans Integrated Service Network (VISN) Director, facility Director, or designee, is the approving official and will determine whether to approve or disapprove the appointment of employees in the hybrid occupation.

- d. **Advanced Image Processing and Presentation Technologies.** Advanced image processing and presentation technologies are employed to enhance imaging techniques to allow clinicians to better visualize anatomical structures. The technology may superimpose an image or a computer-generated image (that is, simulation) onto a patient receiving treatment. This may include augmented reality, image fusion, curvilinear reformatting, surface and volume rendering, and so forth. The technology can be applied in CT, positron emission tomography (PET), ultrasound, magnetic resonance imaging (MRI), and fluoroscopy.
- e. **Continuous Quality Improvement (CQI).** CQI is a process specified by ACR for accreditation of modalities. It requires the DMP to work with clinical practitioners, technologists, biomedical engineers, and original equipment manufacturers (OEM) to improve diagnosis and treatment of disease.
- f. **Experience.**
 - (1) **Creditable Experience.** To be creditable, the experience must have required the use of KSAs associated with current professional DMP practice. Experience satisfying this requirement may be paid or non-paid employment as DMP in the health care field. DMPs who successfully complete an approved postgraduate clinical training/residency program in diagnostic medical physics may apply this as creditable experience on a year-for-year basis.
 - (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 at a level comparable to DMP 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.
- g. **Enterprise.** Enterprise refers to an entire health care system such as VHA or a VISN. It is typically applied to a network of health care facilities involving analytical software platforms, real-time notifications, and support for informed clinical decisions.
- h. **Fusion.** Fusion is the integration of image information from two or more modalities to improve the diagnosis and treatment of diseases. DMP support is required for QA and accreditation of fusion applied in dualistic modalities (e.g., PET/CT, PET/MRI, single-photon emission computed tomography (SPECT)/CT).

- i. **Journey Level.** The full performance level for this qualification standard is the GS-13 grade level.
- j. **Modality.** A modality is an imaging technique involving a type of imaging equipment and associated processes used by clinical practitioners for screening, diagnosis, and/or guiding treatment of disease. Imaging modalities include X-ray radiography, fluoroscopy, mammography, CT, MRI, ultrasound imaging, and nuclear medicine imaging including SPECT and PET.
- k. **National.** National refers to DMP enterprise support for the VHA National Radiology Program, Nuclear Medicine Program, Radiation Oncology Program, and National Health Physics Program (NHPP).
- l. **Picture Archiving and Communication System (PACS).** PACS is the enterprise diagnostic imaging technologies used to store raw data and reconstructed diagnostic images (for example, simulations). It typically uses the Digital Imaging and Communication in Medicine standard for information transfer and provides information to clinical practitioners.
- m. **Simulation.** Simulation is a virtual representation of human anatomy reconstructed from data obtained by diagnostic imaging (for example, CT, MRI, ultrasound, PET, and SPECT).
- n. **Subspecialty.** Subspecialty is an area of board certification that a DMP specializes in for the purpose of completing specialized skills and assignments. Examples of subspecialties include Diagnostic Imaging, Nuclear Medicine, MRI, and Medical Health Physics.

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. Non-citizens may be appointed when it is not possible to recruit qualified citizens in accordance with 38 U.S.C. § 7407(a).
- b. **Education.** Must have completed a master's degree or higher in a physical science, medical physics, or engineering discipline from a college or university accredited by an organization recognized by the U.S. Department of Education.
- c. **Board Certification.** Must be board certified by an approved certifying body in an approved medical physics subspecialty. The board certificate must be current, and the applicant must abide by the certifying body's requirements for maintaining the board certification. The approving official establishes the relevant board certification subspecialty for the DMP position depending on the necessary specialized skills and assignments.

(1) **Approved certifying bodies and DMP subspecialty certifications are as follows:**

- (a) **The American Board of Radiology (ABR) certifications include:**
 - i Diagnostic Medical Physics or Diagnostic Radiologic Physics.
 - ii Nuclear Medical Physics or Medical Nuclear Physics.
 - iii Radiologic Physics.
 - (b) **The American Board of Medical Physics certifications include:**
 - i Diagnostic Imaging Physics.
 - ii Nuclear Medicine Physics.
 - iii Magnetic Resonance Imaging Physics.
 - (c) **The Canadian College of Physicists in Medicine certifications include:**
 - i Diagnostic Radiological Physics.
 - ii Nuclear Medicine Physics.
 - iii Magnetic Resonance Imaging.
 - (d) **The American Board of Science in Nuclear Medicine certifications include:**
 - i Nuclear Medicine Physics and Instrumentation.
 - ii Molecular Imaging.
- (2) **Exception for Non-Board Certified, Entry Level DMPs.**
- (a) Non-board certified DMP applicants who otherwise meet the eligibility requirements for board certification may be given a temporary appointment under the authority of 38 U.S.C. § 7405(c)(2).
 - (b) Non-board certified individuals shall only provide care under the supervision of a board certified DMP at or above the full performance level.
 - (c) Non-board certified individuals may only be appointed at the entry level and may not promoted/converted until certification is obtained.
 - (d) Temporary appointments of non-board certified DMPs may not be extended beyond two years or converted to a new temporary appointment.

- (3) **Failure to Obtain Board Certification.** In all cases, graduate DMPs must actively pursue obtaining board certification from the date of their placement into the occupation. At the time of appointment, the HR Office staff, in collaboration with the supervisor, will provide graduate DMPs the written requirements for board certification, including the date by which they must obtain board certification and the consequences for not becoming board certified by the deadline. Failure to obtain board certification during this time period will result in termination of employment.
 - (4) **Loss of Board Certification.** Management officials, in collaboration with HR Office staff, must immediately relieve DMPs who fail to maintain the required board certification from the occupation of the duties and responsibilities associated with the occupation, which may also result in separation from their employment.
 - (3) HR Office staff must appoint DMPs according to the provisions in VA Handbook, Part II, Chapter 3, Section B, paragraph 16 who have, or have ever had, their DMP certifications 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 registration/certification, where applicable. For employees who do not meet all the basic or assignment specific requirements 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 be newly placed in supervisory or managerial positions.
 - (2) If an assignment above the full performance level requires an additional certification over and above the basic requirements, employees must meet the assignment specific requirement before they can be promoted.
 - (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 basic requirements of the standard.
 - (4) Employees retained in this occupation under this provision who subsequently leave the 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 certification that meet all the basic or assignment specific qualification requirements of this standard must maintain the required credentials as a condition of employment in the occupation.

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. Equivalent foreign degree and coursework substantiated by the National Association of Credential Evaluation Services is required.
- f. **Physical Requirements.** See [VA Directive and Handbook 5019, Employee Occupational Health Service](#) for requirements.
- g. **English Language Proficiency.** DMP candidates must be proficient in spoken and written English in accordance with 38 U.S.C. § 7403(f).

5. SPECIALIZED DMP DUTIES AND SPECIALIZED ASSIGNMENTS.

- a. **Description of Specialized DMP Duties.** Specialized duties required of DMPs include: performing clinical duties (for example, diagnostic, nuclear medicine, MRI, health physics) for the diagnosis and treatment of disease; supporting technological enhancements; conducting research and development for ethical use of radiation; training physicians and allied health technologists; and monitoring regulatory compliance with federal regulations.
 - (1) **Clinical.** DMPs support accreditation of modalities and health care systems and conduct medical physics testing and QA (that is, required by VHA directives, Food and Drug Administration (FDA), TJC, and ACR) and CQI. DMPs perform leadership roles in CQI by actively engaging physicians, technologists, biomedical engineers, and OEMs. DMPs are responsible for QA including optimizing diagnostic protocols for image quality and dose reduction and assisting physicians in the administration of radiopharmaceuticals for targeted radiation therapy.
 - (2) **Technological.** DMPs at the facility and VISN level support the development of purchase specifications for new imaging equipment and assist in the selection of imaging equipment. DMPs assist in the design and review of plans for new or modified imaging rooms as well as new imaging departments.
 - (3) **Research and Development.** DMPs establish the ethical use of radiation in human clinical trials including preparation of or review of research protocols for safe use of radiation prior to approval by a Radiation Safety Committee (RSC) and Institutional Review Board. DMPs support clinical application of new radiopharmaceuticals for diagnosis or treatment of

disease including cancer, new techniques for precise measurement of radiation, dosimetry for calculating patient dose, enterprise dose tracking, and QA. DMPs employ enterprise applications with deep learning applied to advanced image presentation technology. They develop enterprise solutions for QA including the use of simulation phantoms. They develop procedures to assure patient safety such as during MRI scanning of patients with implanted MRI compatible devices. They provide safety and operational oversight of research activities using radiation or MRI.

- (4) **Training.** DMP responsibilities include developing, approving, and administering training required by regulatory authorities including fluoroscopy radiation dose and imaging optimization for CT and fluoroscopy, MRI, and radiation safety. The DMP typically trains physicians on dose reduction; imaging optimization; physical principles of MRI, radiation, and ultrasound; and safety required for board certification examination (for example, ABR). The DMP duties may include administration and/or providing instructions for DMP residents enrolled in an accredited Commission on Accreditation of Medical Physics Education Program (CAMPEP).
- (5) **Regulatory Compliance.** DMP responsibilities include assisting in development and implementation of VHA directives, policies, procedures, and methodologies to assure compliance with federal regulations including, but not limited to, the Nuclear Regulatory Commission (NRC), FDA, Department of Transportation, Environmental Protection Agency, and Occupational Safety and Health Administration. This includes NHPP requirement to issue permits for the safe use of radioactive material.

b. **Specialized Assignments.** DMP functional statements may include the following specialized assignments: Magnetic Resonance Safety Expert (MRSE) and National. The approving official establishes specialized assignments.

- (1) **MRSE.** The MRSE advises the Magnetic Resonance Medical Director (MRMD) on MRI safety practices. The MRSE works closely with the MRMD and Magnetic Resonance (MR) Safety Committee to devise methods to mitigate close calls and adverse events and serves as the chair or as a member of the MR Safety Committee. The MRSE works closely with all MR personnel to ensure safe operation of the MR areas including MR compatibility of items and medical devices in the MR environment and participates in and oversees emergency drills.
- (2) **National.** The DMP provides support for and/or management of VHA national programs. In this role, the DMP participates in initiatives having a high degree of visibility and a significant impact on VHA health care delivery and safety. The DMP assists in the development and implementation of VHA national policies; guidance documents; inspection and audit programs; and training programs for radiation safety and

technical QA in the Diagnostic Imaging and Nuclear Medicine Programs. The DMP provides guidance to VISNs and medical facility executive leadership regarding complex issues. The DMP performs assessments of adverse events such as medical events, misadministrations in radiation oncology, and radiation injuries to patients or staff to determine causes, identify regulatory violations, and assess corrective actions. The DMP performs inspections and audits of VHA medical facilities for compliance and safety of patients and staff. The DMP interacts with federal agencies and accrediting bodies regarding the development of regulatory or accreditation requirements. The DMP assesses or ensures the assessment of facility designs and radiation shielding for complex installations such as external beam radiation oncology facilities and PET/CT and PET/MRI facilities.

6. OFFICIAL POSITION TITLES. All official documents relating to a position (for example, functional statements, and personnel actions) must use the approved official title and grade level as described below:

- a. Diagnostic Medical Physicist, GS-12.
- b. Diagnostic Medical Physicist, GS-13.
- c. Diagnostic Medical Physicist, GS-14.
- d. Supervisory Diagnostic Medical Physicist, GS-14.
- e. Diagnostic Medical Physicist, GS-15.
- f. Supervisory Diagnostic Medical Physicist, GS-15.

7. GRADE REQUIREMENTS.

a. **Creditable Experience.**

- (1) **Knowledge of Current Medical Physicist Practices.** To be creditable, the candidate's experience must demonstrate KSAs associated with current professional DMP practice. Experience satisfying this requirement must be active professional practice, which is paid/non-paid employment as a professional DMP.
- (2) **Quality of Experience.** Experience is only creditable if it is obtained following conferment of a master's degree or higher in a physical science, medical physics, or engineering discipline from an accredited training program and includes work as a professional DMP directly related to the position to be filled. Qualifying experience must also be at a level comparable to DMP experience at the next lower grade level. For all assignments above the full performance level, the higher-level duties must consist of significantly larger 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.

- (3) **Part-Time Experience.** Part-time experience as a professional DMP is creditable according to its relationship to the full-time workweek. For example, a DMP employed 20 hours a week, or on a 1/2-time basis, would receive one full-time workweek of credit for each two weeks of service.
- (4) **Clinical Training/Clinical Residency.** DMPs who successfully complete a CAMPEP-accredited postgraduate clinical residency training program in diagnostic medical physics may apply this as creditable experience on a year-for-year basis.

b. **Grade Determinations.** In addition to the basic requirements outlined in paragraph 4 of this appendix, the following criteria must be met when determining the grade of candidates:

(1) **Diagnostic Medical Physicist, GS-12.**

- (a) **Experience.** None beyond the basic requirements. Note the exception to the board certification requirement in paragraph 4c(2) above.
- (b) **Assignments.** An employee at this grade level serves in a DMP entry level developmental position and works under the general supervision of a board certified DMP. The DMP performs professional work of marked difficulty requiring extended professional training skills. The DMP participates in CQI collaborating with physicians, technologists, biomedical engineers, and OEMs to optimize diagnostic imaging in accordance with ACR Quality Control Manuals (for example, mammography, nuclear medicine, PET, CT, and MRI). The DMP performs physics testing and QA for modalities including X-ray radiography, fluoroscopy, CT, nuclear medicine, PET, MRI, and ultrasound. In nuclear medicine service and/or program, the DMP ensures accuracy of radiopharmaceutical dose measurements and oversees administration of targeted radiotherapy. For non-ionizing radiation, the DMP ensures laser safety, MRI safety, and the safe use of microwave and radio frequency (RF) radiation. In research involving the administration of radioactive material or ionizing radiation to human subjects, the DMP evaluates the risk and efficacy for radiation use in human clinical trials before RSC approval of a trial to assure radiation exposure is appropriate and as low as is reasonably achievable.

(2) **Diagnostic Medical Physicist, GS-13.**

- (a) **Experience.** One year of experience comparable to the next lower level that demonstrates the KSAs related to the duties of the position to be filled.
- (b) **Knowledge, Skills, and Abilities (KSAs).** In addition to meeting the experience requirements for this grade level, the candidate must fully demonstrate the following KSAs:
 - i Knowledge of radiation imaging to include radiation biology, regulatory requirements, regulatory guidance publications, accrediting body standards, publications of expert guidance bodies, and professional societies for the safe and ethical use of radiation in radiologic and nuclear medicine diagnostic imaging, guided interventional procedures and radioactive material for research and targeted radiation cancer therapy using radiopharmaceuticals and intravascular brachytherapy.
 - ii Skill in writing documents such as methodologies, policies and procedures, risk-benefit analyses, and informed consent statements for safe and ethical use of radiation and radioactive material used in research, particularly research involving human subjects.
 - iii Skill in conducting structural shielding design analysis and evaluation for rooms with radiologic and nuclear medicine equipment.
 - iv Ability to perform acceptance and physics testing.
 - v Ability to assist in the development of dose optimized protocols for diagnostic and interventional imaging modalities including X-ray radiography, mammography, fluoroscopy, CT, ultrasound, MRI, nuclear medicine, and PET.
 - vi Ability to implement QA procedures for accurate and safe delivery of radiation dose used in targeted cancer treatment using radiopharmaceuticals and brachytherapy including measuring the radioactive dose delivered to the patient and reporting medical events and misadministrations of radiation to regulatory authorities.
 - vii Ability to perform radiation surveys, develop procedures, set action levels, provide radiation safety training (for modalities such as fluoroscopy, CT, and nuclear medicine), and develop competencies for radiologic equipment.
 - viii Ability to process information including using data reconstruction software (for example, 3D, 4D, advanced image processing, and presentation technologies) from multi-modality imaging datasets

(e.g., SPECT/CT, PET/CT, MRI/CT) and image guided interventional procedures (e.g., fluoroscopy, CT, MRI, and ultrasound).

- ix Ability to implement requirements of NRC regulations and the radioactive materials permit including monitoring occupational and public radiation dose, monitoring control and inventory of radioactive material, performing calibration of radiation survey instruments, ensuring radioactive materials security, decommissioning surveys, training personnel, shipping, and disposing of radioactive waste.
 - x Ability to evaluate safety programs to include training personnel on occupational hazards and risks to patients from non-ionizing radiation, such as lasers (visible and invisible), microwave radiation, and RF radiation and magnetic fields generated by MRI.
- (c) **Assignments.** The DMP at this grade level serves at the full performance level using specialized skills to perform complex work. The DMP ensures compliance with TJC and ACR accreditation standards; performs CQI; and guides radiation safety in accordance with VHA directives, NHPP radioactive materials permit, and regulatory requirements. The DMP provides leadership and guidance for entry level DMPs and Radiation Safety Officers (RSOs) at facilities without a DMP and may be named RSO on NHPP Radioactive Material Permits. The DMP performs comprehensive acceptance testing and QA for modalities including X-ray radiography, fluoroscopy, CT, nuclear medicine, MRI, and ultrasound. DMP performs comprehensive calculations to evaluate shielding requirements of X-ray and nuclear medicine and surveys to verify the adequacy of shielding design. For non-ionizing radiation, the DMP ensures safe use of MRI (for example, specialized assignment as MRSE), microwave, and RF radiation application in therapeutic procedures. The DMP develops physics training for clinical practitioners, radiation safety training for staff, and instructions for radiology residents on medical physics. The DMP works with service chiefs and provides technical support of PACS for enterprise informatics including analytical software used to aid radiologists in dose tracking and calculating patient dose.

(3) **Diagnostic Medical Physicist, GS-14.**

- (a) **Experience.** One year of experience comparable to the next lower level that demonstrates the knowledge, skills, and abilities related to the duties of the position to be filled.

- (b) **Knowledge, Skills, and Abilities (KSAs).** In addition to meeting the experience requirements for this grade level, the candidate must fully demonstrate the following KSAs:
- i Skill to develop enterprise methodologies, local policies and procedures, manage QA, protocols, radiation doses, and image optimization.
 - ii Skill to implement new diagnostic imaging techniques (for example, on-board imaging, simulations, advanced image processing, and presentation technologies) for image guided interventional procedures and targeted cancer treatment and calculation methods for using radiopharmaceuticals and intravascular brachytherapy.
 - iii Skill to develop national, regional, and local policies and procedures to implement requirements of NRC regulations and radioactive materials permits including monitoring occupational and public radiation doses, control and inventory of radioactive material, calibration of radiation survey instruments, radioactive materials security, decommissioning surveys, shipping, and disposal of radioactive waste.
 - iv Skill to develop national, regional and local policies, and procedures to protect workers and patients from ionizing and non-ionizing radiation. This includes evaluation of risk from MRI scans to patients with implanted medical devices.
 - v Skill to develop training curriculum for clinical practitioners such as radiology residents preparing for ABR examination, diagnostic radiologic technologists training on radiation dose management, and DMPs training on physics testing, acceptance testing, and the commissioning of diagnostic imaging equipment.
 - vi Ability to assist in the commissioning of informatics systems such as PACS.
 - vii Ability to implement and assess programs to reduce the likelihood and severity of adverse incidents, and to perform causal analyses after incidents including the use of techniques such as Failure Mode and Effect Analysis, Root Cause Analysis, and Fault Tree Analysis.
- (c) **Assignment.** For all assignments above the full performance level, the higher-level duties must be 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. The DMP at the advanced

performance level uses independent judgment and proven leadership skills to perform complex tasks having a VHA-wide impact. The DMP performs a lead role in managing enterprise software used to aid radiologists, dose tracking, calculating patient dose, advanced image processing and presentation technologies and fusion of modalities, simulations and on-board imaging for diagnosis, and treatment using interventional procedures and/or targeted radiotherapy. The DMP plans, directs, and executes program development initiatives. The DMP collaborates between service chiefs and national program offices in the selection, technical support, and implementation of enterprise software with connectivity between hardware (for example, diagnostic imaging systems), electronic health record, and software (for example, PACS). The DMP plays a lead role in using enterprise data collection, dissemination, and translation for clinical practitioners who operate diagnostic imaging equipment. The DMP uses enterprise software applications to generate dashboards and summary reports with metrics to document requirements for RSC meetings and ACR requirements for accreditation. The DMP collaborates with service chiefs, medical physicists, biomedical engineers, and technologists to implement and deploy emerging technologies (for example, simulations, fusion, advanced image processing, and presentation technologies) and enterprise QA and CQI. The DMP develops physics content for training of residents and fellows preparing for ABR and/or other similar certifications. The DMP may be an administrator for CAMPEP residency.

(4) **Supervisory Diagnostic Medical Physicist, GS-14.**

- (a) **Experience.** One year of experience comparable to the next lower level that demonstrates the knowledge, skills, and abilities related to the duties of the position to be filled.
- (b) **Knowledge, Skills, and Abilities (KSAs).** In addition to meeting the experience requirements for this grade level, the candidate must fully demonstrate the following KSAs:
 - i Knowledge of instructional methods.
 - ii Skill using written and verbal communication to explain complex technical issues.
 - iii Ability to assess the qualifications and abilities of current and prospective employees to include staff performance evaluations and professional development.
 - iv Ability to collaborate with the members of other disciplines and supervisors and to represent the profession both in and outside of

the organization. This includes knowledge of the roles, contributions, and interrelationships with other health care specialties and supporting divisions.

- v Ability to manage and supervise employees and the ability to perform administrative duties to include, but not limited to: coordinating staffing, workload, and schedules; setting priorities and delegating tasks and responsibilities; reviewing qualifications and abilities of current and prospective employees; interviewing and selecting candidates; providing training and departmental orientation overseeing technical operations; granting promotions; and reviewing competencies and conducting performance appraisals.

- (c) **Assignments.** For all assignments above the full performance level, the higher-level duties must be of significant scope, administrative independence, complexity, and range of variety as described in this standard at the specified grade level. The Supervisory DMP must spend 25% or more of their time providing technical and administrative supervision over staff one grade level below. The Supervisory DMP plans, schedules, and assigns work; accepts, amends, or rejects completed work; assures production and accuracy requirements are met; interviews and selects candidates; recommends performance standards and appraises performance; approves leave; hears and resolves complaints; and effects minor disciplinary actions. The incumbent has full supervisory responsibility for DMPs, Health Physicists, and may include other administrative and professional staff within the VHA national program office or VISN. The incumbent will typically report to a national program officer or facility Chief of Staff or VISN Chief Medical Officer. In addition to duties for the Diagnostic Medical Physicists, GS-14, the Supervisory DMP oversees the technical development and implementation of new radiopharmaceutical therapy techniques; oversees the activities of all other DMPs, technologists, and other staff members assigned to the unit; directs the technical aspects of modalities and targeted radiopharmaceutical therapy procedures; plans and directs work; develops performance plans and evaluates staff performance; and supervises other administrative functions.

(5) **Diagnostic Medical Physicist (Program Coordinator), GS-15.**

- (a) **Experience.** One year of experience comparable to the next lower level that demonstrates the knowledge, skills, and abilities related to the duties of the position to be filled.

- (b) **Knowledge, Skills, and Abilities (KSAs).** In addition to meeting the experience requirements for this grade level, the candidate must fully demonstrate the following KSAs:
- i Knowledge of regulations (to include, but not limited to FDA and NRC) and the Federal Policy for the Protection of Human Subjects regarding the use of radiation for research and development including approval of medical devices and clinical trials. NOTE: This includes clinical applications for emerging technologies (for example, dual energy spectral CT), fusion modalities (e.g., PET/CT, MRI/CT), and simulations with advanced image processing and presentation technologies (for example, image guided interventional procedures).
 - ii Skill working with high-level organizations such as headquarters-level offices or national program offices to support the occupations of DMP, medical health physicists, and program specialists.
 - iii Skill establishing policy and procedures to manage occupational hazards and patient risk from ionizing and non-ionizing radiation.
 - iv Skill in working with acquisition staff for consolidated equipment purchases for a network of health care facilities and to coordinate with DMPs and health physicists in developing performance specifications, selection, installation, and commissioning of diagnostic imaging equipment.
 - v Ability to audit health care systems for compliance with directives, material permits, FDA standards, and accreditation requirements of TJC and ACR.
 - vi Ability to manage national QA programs and CQI of diagnostic imaging including communicating with regulatory agencies and accrediting organizations and developing directives, policies, and procedures.
 - vii Ability to work with high-level offices such as headquarters level or national program offices to develop medical physics and radiation safety training requirements.
- (c) **Assignments.** For all assignments above the full performance level, the higher-level duties must be 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. The DMP (Program Coordinator) is responsible for a complex range of technical work, which requires demonstrated leadership and exceptional professionalism. The program coordinator is at the VISN or national level and tasked with

leading specialized national programs that support clinical practice for example the National Radiology Program, National Nuclear Medicine Program and Radiation Safety, National Radiation Oncology Program, or NHPP. The program coordinator reports to a national level program director, deputy director, senior executive service director, VISN director, VISN deputy director, or VISN Chief Medical Officer. The program coordinator audits VHA health care systems for regulatory compliance regarding NRC regulations, radioactive materials permit conditions, and accreditation requirements. Duties involve program development and collaboration between service chiefs and national program managers to implement enterprise software with connectivity between hardware. (e.g., diagnostic imaging systems), electronic health records, and analytical software. The program coordinator plays a lead role in using enterprise data collection, dissemination, and translation for clinical practitioners including radiologists, oncologists, interventional radiologists, and diagnostic radiology technologists who operate diagnostic imaging equipment. The program coordinator collaborates with service chiefs, medical physicists, biomedical engineers, and technologists and develops and deploys emerging technologies and enterprise software for dose tracking, calculating patient dose, QA, and CQI. The program coordinator develops medical physics content for training residents and fellows preparing for board certification and CAMPEP for DMP residency.

(6) **Supervisory Diagnostic Medical Physicist (Director), GS-15.**

- (a) **Experience.** One year of experience comparable to the next lower level that demonstrates the knowledge, skills, and abilities related to the duties of the position to be filled.
- (b) **Knowledge, Skills, and Abilities (KSAs).** In addition to meeting the experience requirements for this grade level, the candidate must fully demonstrate the following KSAs:
 - i Knowledge of radiation safety program regulations, guidelines, and policies to provide technical direction, evaluation, and oversight and to ensure compliance with national standards and requirements.
 - ii Knowledge of instructional methods.
 - iii Skill developing complex national, regional, and local policies and procedures that support an integrated health care delivery system.
 - iv Skill working with national program offices to support the occupations of DMP, medical health physicists, and program

specialists by developing medical physics and radiation safety training requirements.

- v Skill using written and verbal communication to explain complex technical issues to staff members and supervisors, technical professionals, and other high-ranking officials such as government officials and members of Congress.
 - vi Ability to collaborate with the members of other disciplines and supervisors to represent the profession both in and outside of the organization. This includes knowledge of the roles, contributions, and interrelationships with other health care specialties and supporting divisions.
 - vii Ability to supervise employees and the ability to perform administrative duties to include, but not limited to: coordinating staffing, workload and schedules; setting priorities; delegating tasks and responsibilities; reviewing qualifications and abilities of current and prospective employees; interviewing and selecting candidates; providing training and departmental orientation; overseeing technical operations; granting promotions; reviewing competencies; and conducting performance appraisals.
- (c) **Assignments.** For all assignments above the full performance level, the higher-level duties must be of significant scope, administrative independence, complexity, and range of variety as described in this standard at the specified grade level. The Supervisory DMP must spend 25% or more of their time providing technical and administrative supervision over staff one grade level below. The Supervisory DMP plans, schedules, and assigns work; accepts, amends, or rejects completed work; assures production and accuracy requirements are met; interviews and selects candidates; recommends performance standards and appraises performance; approves leave; hears and resolves complaints; and effects minor disciplinary actions. The Supervisory DMP (Director) is responsible for a complex range of technical work, which requires demonstrated leadership and exceptional professionalism. The Supervisory DMP (Director) is tasked with leading specialized national programs that support clinical practice. The Supervisory DMP (Director) audits VHA health care systems for regulatory compliance regarding NRC regulations, radioactive materials permit conditions, and accreditation requirements. Duties involve program development and collaboration between service chiefs and national program managers to implement enterprise software with connectivity between hardware (e.g., diagnostic imaging systems), electronic health records, and analytical software. The Supervisory DMP (Director) plays a lead role in using enterprise data collection, dissemination, and translation for clinical

practitioners including radiologists, oncologists, interventional radiologists, and diagnostic radiology technologists who operate diagnostic imaging equipment. The Supervisory DMP (Director) collaborates with service chiefs, medical physicists, biomedical engineers, and technologists and develops and deploys emerging technologies and enterprise software for dose tracking, calculating patient dose, QA, and CQI.

8. 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)