

STAFFING

1. REASON FOR ISSUE: To revise Department of Veterans Affairs (VA) qualification standards for 21 VA occupations filled under 38 U.S.C. § 7401(3).

2. SUMMARY OF CONTENTS/MAJOR CHANGES: These changes are necessary for full conversion of these occupations from the Title 5 competitive service employment system into VA's Title 38 Hybrid excepted service employment system. Authority is given to the Secretary of the VA under 38 U.S.C. § 7402 to prescribe qualifications for occupations identified in 38 U.S.C. § 7401(3). The pages in this revision are to be inserted at the corresponding page numbers in part II of VA Handbook 5005. These changes will be incorporated into the electronic version of VA Handbook 5005 that is maintained on the [Office of Human Resources Management and Labor Relations Web site](#). Significant changes for each qualification include:

- a. Coverage section added that provides a brief description of the occupation.
- b. Standard language and sections added (basic requirements, grandfathering clauses, deviations, etc.).
- c. Description of creditable experience included in the grade requirements.
- d. Description of typical assignments and knowledge, skills, abilities, and other competencies included at each grade level.

3. RESPONSIBLE OFFICE: The Recruitment and Placement Policy Service (059), Office of the Deputy Assistant Secretary for Human Resources Management and Labor Relations.

4. RELATED DIRECTIVE: VA Directive 5005, Staffing.

5. RESCISSIONS: None.

CERTIFIED BY:

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

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CONTENTS-CONTINUED

PARAGRAPH	PAGE
APPENDICES-Continued	
II-G14. <u>OCCUPATIONAL THERAPIST QUALIFICATION STANDARD</u>	II-G14-1
II-G15. <u>LICENSED PHARMACIST QUALIFICATION STANDARD</u>	II-G15-1
II-G16. <u>DOCTOR OF CHIROPRACTIC QUALIFICATIONS STANDARD</u>	II-G16-1
II-G17. <u>DEVELOPMENT OF QUALIFICATION STANDARDS FOR VETERANS</u> <u>HEALTH ADMINISTRATION (VHA) POSITIONS FILLED UNDER</u> <u>38 U.S.C. § 7401(3)</u>	II-G17-1
[II-G18. <u>PSYCHOLOGIST</u>	II-G18-1
II-G19. <u>NUCLEAR MEDICINE TECHNOLOGIST</u>	II-G19-1
II-G20. <u>DIETITIAN</u>	II-G20-1
II-G21. <u>KINESIOTHERAPIST</u>	II-G21-1
II-G22. <u>OCCUPATIONAL THERAPY ASSISTANT</u>	II-G22-1
II-G23. <u>PHYSICAL THERAPY ASSISTANT</u>	II-G23-1
II-G24. <u>MEDICAL TECHNOLOGIST</u>	II-G24-1
II-G25. <u>DIAGNOSTIC RADIOLOGIC TECHNOLOGIST</u>	II-G25-1
II-G26. <u>THERAPEUTIC RADIOLOGIC TECHNOLOGIST</u>	II-G26-1
II-G27. <u>MEDICAL INSTRUMENT TECHNICIAN</u>	II-G27-1
II-G28. <u>PHARMACY TECHNICIAN</u>	II-G28-1
II-G29. <u>AUDIOLOGIST</u>	II-G29-1
II-G30. <u>SPEECH LANGUAGE PATHOLOGIST</u>	II-G30-1
II-G31. <u>AUDIOLOGIST/SPEECH LANGUAGE PATHOLOGIST</u>	II-G31-1
II-G32. <u>ORTHOTIST-PROSTHETIST</u>	II-G32-1
II-G33. <u>MEDICAL RECORD ADMINISTRATOR</u>	II-G33-1
II-G34. <u>PROSTHETIC REPRESENTATIVE</u>	II-G34-1
II-G35. <u>MEDICAL RECORD TECHNICIAN</u>	II-G35-1
II-G36. <u>DENTAL ASSISTANT</u>	II-G36-1
II-G37. <u>DENTAL HYGIENIST</u>	II-G37-1
II-G38. <u>BIOMEDICAL ENGINEER</u>	II-G38-1]
II-H. <u>APPOINTMENT PROCEDURES BY OCCUPATION/ASSIGNMENT</u>	
II-H1. <u>PROCEDURES FOR APPOINTING PHYSICIANS TO SERVICE CHIEF</u> <u>AND COMPARABLE POSITIONS</u>	II-H1-1
II-H2. <u>PROCEDURES FOR APPOINTING DENTISTS AND EFDAS</u>	II-H2-1
II-H3. <u>PROCEDURES FOR APPOINTING PODIATRISTS</u>	II-H3-1
II-H4. <u>PROCEDURES FOR APPOINTING OPTOMETRISTS</u>	II-H4-1
II-H5. <u>RECRUITMENT, APPOINTMENT, ADVANCEMENT, CHANGE IN</u> <u>ASSIGNMENT AND REASSIGNMENT OF REGISTERED NURSES (RNs)</u> <u>IN GRADES IV AND V</u>	II-H5-1
II-H6. <u>PROCEDURES FOR APPOINTING NURSE ANESTHETISTS TO</u> <u>SECTION CHIEF POSITIONS</u>	II-H6-1
II-H7. <u>PROCEDURES FOR APPOINTING PHYSICIAN ASSISTANTS AT</u> <u>CHIEF GRADE</u>	II-H7-1

CONTENTS-CONTINUED

PARAGRAPH	PAGE
APPENDICES-Continued	
II-H8. <u>PROCEDURES FOR APPOINTING CHIEFS OF PHARMACY SERVICE (ALL GRADES), CLINICAL PHARMACY/PHARMACY SPECIALISTS, AND PROGRAM SPECIALISTS AT GRADES GS-13 AND ABOVE</u>	II-H8-1
II-H9. <u>PROCEDURES FOR APPOINTING OCCUPATIONAL AND PHYSICAL THERAPISTS AS SECTION CHIEF</u>	II-H9-1
II-H10. <u>PROCEDURES FOR APPOINTING DOCTORS OF CHIROPRACTIC</u>	II-H10-1
II-I. <u>ENGLISH LANGUAGE PROFICIENCY</u>	II-I-1
II-J. <u>REQUESTS FOR APPROVAL TO PETITION THE UNITED STATES DEPARTMENT OF STATE (DOS) FOR SUPPORT OF A WAIVER OF THE 2-YEAR HOME RESIDENCE REQUIREMENT OF THE UNITED STATES EXCHANGE VISITOR PROGRAM</u>	II-J-1
II-K. <u>RCVL (RESIDENT/TRAINEE CREDENTIALS VERIFICATION LETTER)</u>	II-K-1
II-L. <u>CREDENTIALING CHECKLIST</u>	II-L-1
II-M. <u>SAMPLE CONSULTANT CERTIFICATE</u>	II-M-1
II-N. <u>CAREER INTERN PROGRAM</u>	II-N-1
II-O. <u>ORGANIZATIONAL LOCATION OF HYBRID TITLE 38 PROFESSIONAL STANDARDS BOARDS</u>	II-O-1
II-P. <u>PROCEDURES FOR SELECTING HYBRID TITLE 38 PROFESSIONAL STANDARDS BOARDS MEMBERS</u>	II-P-1
II-Q. <u>PRESIDENTIAL MANAGEMENT FELLOWS PROGRAM</u>	II-Q-1

*Use in conjunction with the OPM Standard.

[APPENDIX G18. PSYCHOLOGIST QUALIFICATION STANDARD
GS-180
Veterans Health Administration

1. COVERAGE. The following are requirements for appointment as a psychologist in the Veterans Health Administration (VHA). Psychologists engage in professional and scientific work which relates to behavior, capacities, traits, interests, and emotions. These requirements apply to all VHA psychologists in the GS-180 series, including those assigned to VA medical centers, Community-based Outpatient Clinical (CBOCs), Vet Centers, Veterans Integrated Service Network (VISN) offices, the VHA National Center for Organizational Development and VHA Central Office. This work may include any one or a combination of the following: providing professional clinical services, conducting research, carrying out education and training activities, clinical consultation, supervision, and administration.

2. BASIC REQUIREMENTS. The basic requirements for employment as a VHA psychologist are prescribed by: Public Law 96-151 codified in Title 38, U.S.C. § 7402. To qualify for appointment, all applicants for the position of psychologist in VHA must meet the following:

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified citizens in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Education**

(1) Have a doctoral degree in psychology from a graduate program in psychology accredited by the American Psychological Association (APA). The specialty area of the degree must be consistent with the assignment for which the applicant is to be employed.

AND

(2) Have successfully completed a professional psychology internship training program that has been accredited by APA. Exceptions: (1) new VHA psychology internship programs that are in the process of applying for APA accreditation are acceptable in fulfillment of the internship requirement, provided that such programs were sanctioned by the VHA Central Office Program Director for Psychology and the VHA Central Office of Academic Affiliations at the time that the individual was an intern and (2) VHA facilities who offered full one-year pre-doctoral internships prior to PL 96-151 (pre-1979) are considered to be acceptable in fulfillment of the internship requirement.

(c) **Licensure.** Hold a full, current, and unrestricted license to practice psychology at the doctoral level in a State, Territory, Commonwealth of the United States (e.g., Puerto Rico), or the District of Columbia.

Exception. The Secretary may waive the requirement of licensure for an individual psychologist for a period not to exceed 2 years from the date of employment on the condition that such a psychologist provide care only under the supervision of a psychologist who is so licensed. Non-licensed psychologists who otherwise meet the eligibility requirements may be given a temporary appointment as

**PART II
APPENDIX G18**

a graduate psychologist under the authority of 38 U.S.C. § 7405 (a) (1) (D). Failure to obtain licensure during that period is justification for termination of the temporary appointment. This may result in termination of employment.

(d) **Loss of Credential.** An employee in this occupation who fails to obtain licensure/certification/registration within the required time frame, or who fails to maintain the required licensure/certification/registration must be removed from the occupation, which may also result in termination of employment.

For occupations which require an active credential (licensure/certification/registration) at all grade levels, at the discretion of the appointing official, an employee may be reassigned to another occupation for which he/she qualifies if a placement opportunity exists. For occupations which require an active credential (licensure/certification/registration) in assignments above the full-performance level only, at the discretion of the appointing official, an employee may remain at an appropriate lower grade level in the occupation when both of the following apply: the credential is not a requirement and a placement opportunity exists.”

(e) **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 Hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/ registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

(f) **Physical Requirements.** See VA Directive and Handbook 5019.

(g) **English Language Proficiency:** Psychologists must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS

a. Definitions

(1) Creditable Experience

(a) **Current Professional Psychology Practice.** To be creditable, the experience must be post-doctoral degree and must have required the use of knowledge, skills, abilities, and other characteristics associated with current professional psychology practice. Creditable post-doctoral degree experience can be obtained through employment as a psychologist or through participating in a supervised post-doctoral psychology training program. This may be evidenced by one or both of the following:

1. Active professional practice. Active professional practice means paid/non-paid employment as a professional psychologist.

2. A full, current, and unrestricted license.

(b) **Quality of Experience.** Experience is only creditable if it is post-doctoral degree experience as a professional psychologist directly related to the duties to be performed. Qualifying experience must also be at a level comparable to professional psychology experience at the next lower level.

(c) **Part-time Experience.** Part-time experience is creditable according to its relationship to a full-time workweek. For example, a psychologist employed 20 hours per week, or on a ½ time basis, would receive 1 full-time workweek of credit for each 2 weeks of service.

(2) **Post-Doctoral Degree Fellowships.** Post-doctoral degree fellowships are training programs in an advanced area of clinical practice. Training as a fellow may substitute for creditable experience on a year-for-year basis.

b. **Grade Determinations.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates:

**PART II
APPENDIX G18****(1) GS-11**

(a) **Experience.** None beyond the basic requirements.

(b) **Assignment.** Staff psychologists at this level diagnose mental disorders, conduct psychological and/or neuropsychological assessments, treat mental disorders through a variety of modalities, and provide adjunctive interventions for treatment of medical disorders. They practice under the close supervision of a licensed psychologist.

(2) GS-12

(a) **Experience.** In addition to the basic requirements at the GS-11 level, at least 1 year of experience as a professional psychologist equivalent to the next lower grade level. Individuals assigned as GS-12 psychologists may be in the process of obtaining licensure at the independent practice level. If unlicensed, the individual must be supervised by a licensed psychologist and the experience and supervision must meet the standards for psychology licensure. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of, and ability to apply, a wide range of professional psychological theories and assessment methods to a variety of patient populations.
2. Ability to develop coherent treatment strategies.
3. Ability to incorporate new clinical procedures.

(c) **Assignment.** At the GS-12 level, unlicensed psychologists practice under the supervision of a licensed psychologist, but with less need for consultation than at the GS-11 grade level. They may be assigned to any program area.

(3) GS-13

(a) **Licensure.** Hold a full, current, and unrestricted license to practice psychology at the doctoral level in a State, Territory, Commonwealth of the United States (e.g., Puerto Rico), or the District of Columbia.

(b) **Experience.** In addition to the experience requirements at the GS-12 level, at least 1 additional year of experience as a psychologist equivalent to the next lower grade level. In addition the candidate must demonstrate the following KSAs:

(c) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of, and ability to apply, advanced professional psychological theories and techniques to the full range of patient populations.

2. Ability to provide professional advice and consultation in areas related to professional psychology and behavioral health.

3. Knowledge of clinical research literature.

4. For supervisory assignments

a. Ability to provide supervision in areas related to behavioral health and social services provision in order to accomplish the organizational goals and objectives.

b. Ability to provide fair, principled and decisive leadership for a work environment that promotes shared accountability.

(d) **Assignments.** This is the full performance level for staff psychologists. At this level psychologists are licensed at the doctoral level to practice independently in the provision of psychological services consulting with peers and supervisors as appropriate. They are assigned to any VHA program and setting, including inpatient or outpatient medicine, surgery, mental health, neurology, rehabilitation medicine, geriatrics, Vet Centers, and the VHA National Center for Organizational Development.

1. **Staff Psychologists** diagnose mental disorders, conduct psychological and/or neuropsychological assessments, treat mental disorders through a variety of modalities and provide adjunctive interventions for treatment of medical disorders. Among the modalities provided are individual, family, and group psychotherapies, and other interventions such as biofeedback, psychological hypnosis, and environmental interventions. They consult with medical center staff on a wide variety of patient care issues. Staff psychologists may be involved in program evaluation and/or research activities.

2. **Supervisory Psychologists.** At this level supervisory psychologists typically have collateral supervisory duties primarily for non-professional staff, although a small number of professional staff may be supervised as well (i.e., less than three). Supervisory psychologists at this level may be assigned to any program area and may be involved in program evaluation and/or research activities. At this level, supervisory psychologists independently provide psychological services at all levels of complexity and consult with peers and supervisors as appropriate.

(4) **GS-14**

(a) **Licensure.** Hold a full, current, and unrestricted license to practice psychology at the doctoral level in a State, Territory, Commonwealth of the United States (e.g., Puerto Rico), or the District of Columbia.

(b) **Experience.** At least 1 year of professional psychologist experience equivalent to the next lower grade level, and must fully meet the KSAs for that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

**PART II
APPENDIX G18**

(c) **Assignments.** 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.

1. Psychology Program Manager. Psychologist program managers have broad program management responsibilities which include the operation and management of key clinical, training, or administrative programs. The size of the medical center, program managed, and scope of responsibility are grade determining. Examples include (but are not limited to) managers of addiction, post traumatic stress disorder (PTSD), mental health intensive case management (MHICM), partial hospitalization, residential rehabilitation, domiciliary, palliative care, neuropsychology, and internship and post-doctoral fellowship training programs; psychology program oversight and coordination as a psychology executive; and program oversight and coordination as Associate Chief of Staff (ACOS) for Education, ACOS for Research, etc.

Responsibilities include development and implementation of programs, policies, and procedures; oversight of administrative and programmatic resources; and monitoring of outcomes using a data-driven quality assurance process. Decisions made affect staff and other resources associated with the programs managed and are made while exercising wide latitude and independent judgment. Such programs deliver specialized, complex, highly professional services that are important program components of the medical center and significantly impact the health care provided to veterans.

Psychologist program managers that serve as psychology executives have full responsibility for oversight of the professional practice of psychology to ensure the highest quality of psychological care provided to veterans throughout the facility and its affiliated clinics. This responsibility also includes ensuring that all psychologists in the facility and its affiliated clinics meet the requirements of this qualification standard.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Ability to organize work, set priorities, delegate tasks, and meet multiple deadlines

*(2) Skill in managing and directing the work of others to accomplish program goals and objectives, and ability to devise ways to adapt work operations to new and changing programs, staffing, and budget requirements, etc.

*(3) Ability to translate management goals and objectives into well-coordinated and controlled work operations.

*(4) Ability to establish and monitor production and performance priorities and standards.

(5) Knowledge of, and ability to appropriately utilize, evidence based practices and clinical practice guidelines and ability to guide staff in using these tools.

(6) Ability to deal effectively with individuals or groups representing widely divergent backgrounds, interests, and points of view.

*(7) Ability to analyze organizational and operational problems and to develop and implement solutions that result in sound operation of the program.

2. Psychologist Clinician Investigator. Psychologist clinician investigators are actively involved as principal investigators or co-principal investigators in peer-reviewed VA, National Institutes of Health (NIH), or comparably rigorous intramural or extramurally funded research programs. Responsibilities include peer review activities for VA and non-VA research, e.g., grant review for VA or NIH proposals, local research service committees and/or boards, such as Research and Development (R&D) Service, Health Services Research and Development (HSR&D) Service, or Institutional Review Board (IRB), and service as a consulting editor for peer-reviewed journals.

Psychologist clinician investigators have achieved significant professional recognition by making scientific contributions to research projects with potential for substantial impact. In addition to active involvement in peer-reviewed research and other peer review activities as noted above, this recognition must be demonstrated by attainment of at least 3 of the following: multiple publications in peer-reviewed professional literature; a consistent record of presentation of findings at national scientific meetings; attainment of an academic appointment at the affiliated medical school or local university, usually at the rank of associate professor or equivalent; and responsibility for multiple funded research projects.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of, and ability to apply, appropriate scientific methods in the design and execution of basic and applied research.

*(2) Ability to coordinate work across multiple settings.

*(3) Ability to convey scientific concepts and methodological principles to individuals with diverse levels of technical expertise

3. Supervisory Psychologist. Individuals designated as supervisory psychologists have supervisory responsibility for subordinates. Supervisory psychologists also have line and staff authority for resource allocations within the area of responsibility and ensure the efficient operation of the organizational unit. Examples of assignments in this category include (but are not limited to) chief of psychology, chief of a patient care service line, or department or division director. Responsibilities include supervision of staff, professional management, and administrative responsibilities that are complex in scope and that constitute a significant component of the medical center. Decisions are made exercising wide latitude and independent judgment.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Ability to effectively supervise and manage subordinate employees.

*(2) Skill in assessing qualifications and abilities of current and prospective employees.

*(3) Ability to develop productivity standards appropriate to each service provided and each venue.

**PART II
APPENDIX G18**

(4) Skill in interpersonal relationships, including conflict resolution.

(5) Ability to deal effectively with individuals or groups representing widely divergent backgrounds, interests, and points of view.

*(6) Skill in working collaboratively with other disciplines and supervisors.

4. Psychologist Leadership Positions at the VISN or National Level Assignments. Leadership positions at the VISN or national level are characterized by their scope, level of complexity, significant impact on VHA mission, significant importance to the VISN, etc. Examples of such assignments include (but are not limited to): VISN liaison for mental health, associate chief of service at the national level, associate program manager at the VISN or national level, etc.

GS-14 psychologist leadership positions direct a mental health, behavioral science, other patient care program component at the VISN or national level or direct organizational development at the national level. Leadership positions at the VISN or national level are graded at the GS-14 level when the duties and responsibilities are such that they are of substantial importance to the overall functioning of the VISN or national program. Duties are exercised with wide latitude, autonomy, and independence. The administrative or technical work is of substantial difficulty and responsibilities are significant. Individuals at this level have delegated authority to determine long range work plans and assure that implementation of the goals and objectives is carried out. They may serve as consultants to other management officials in the field, VISN, or national level. Incumbents typically report to managers of the overall program at the next higher level of supervision.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of, and ability to understand and communicate, existing policies and regulations.

*(2) Ability to provide information about VISN or national policy to a wide variety of audiences in a useable and understandable manner.

*(3) Ability to develop and recommend new or revised policies that are consistent with organizational goals and objectives.

(4) Knowledge of, and ability to utilize, resource materials as well as ability to develop new materials when needed.

(5) Ability to relate to individuals at many different levels both within and external to the organization.

(6) Ability to communicate effectively orally and in writing with a diverse group of professional staff.

NOTE: Some psychologists (generally those who are GS-14 program managers and supervisory psychologists) are assigned duties and responsibilities at the VISN or national level that are at a higher level of technical and administrative complexity than their facility-level responsibilities. In these cases, the higher level duties must be of significant scope and complexity, and must be of critical importance to

the VISN or national program. If such higher-level assignments comprise 25 percent or more of the individual's overall duties and responsibilities, these assignments would be grade controlling at the higher, i.e., GS-15, level.

(5) **GS-15**

(a) **Licensure.** Hold a full, current, and unrestricted license to practice psychology at the doctoral level in a State, Territory, Commonwealth of the United States (e.g., Puerto Rico), or the District of Columbia.

(b) **Experience.** At least 1 year of professional psychologist experience equivalent to the next lower grade level, and must fully meet the KSAs for that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*).

(c) **Assignments.** 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.

1. Senior Program Manager. Senior psychologist program managers have very broad responsibility for multiple programs or have responsibility for a large service organization that is of considerable scope, size, and complexity. Examples of positions are similar to those listed under the GS-14 program manager heading, but at the GS-15 level, the size, scope, significance and impact are greater. GS-15 senior psychologist program managers have oversight for programs that have 10 or more professional staff.

Responsibilities include development of short and long range goals and plans; development and implementation of policies and procedures to ensure that plans are carried out and goals are met; administrative and programmatic resource management; and monitoring outcomes using a data-driven quality assurance process. Decisions made affect staff and other resources associated with the programs managed and are made exercising very wide latitude and independent judgment. The programs managed are substantial program components that deliver specialized, complex, highly professional services and significantly impact the health care provided to veterans.

Senior psychologist program managers have full responsibility for oversight of the professional practice of psychology in large medical centers, generally with many psychologists, and ensure the highest quality of psychological care provided to veterans throughout the facility and its affiliated clinics. This responsibility includes ensuring that all psychologists in the facility and its affiliated clinics meet the requirements of this qualification standard.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Skill in managing and directing the work of large, complex organizational units and in applying effective management practices.

PART II
APPENDIX G18

*(2) Ability to balance responsibilities in a complex environment and to work with great autonomy; ability to set priorities and delegate tasks, meet multiple deadlines, analyze complex organizational problems; and ability to develop and implement effective solutions for those problems.

(3) Skill in persuasion, negotiation, and motivation to negotiate multiple program policies.

(4) Skill in interpersonal relationships in dealing with employees and other managers using advanced consultation and problem solving skills.

*(5) Ability to assess need for basic and complex services across multiple programmatic patient care venues.

*(6) Ability to coordinate the efforts of multiple program elements across a complex system.

(7) Skill in the application and analysis of measurement tools to systems issues.

2. Senior Psychologist Clinician Investigator. Senior psychologist clinician investigators perform assignments at the highest level of investigative independence involving complex research programs and/or multi-site/center trials. Responsibilities include active involvement as principal investigators for peer reviewed VA, NIH, or comparably rigorous intramural or extramurally funded research programs, high-level peer review activities for VA and non-VA research (e.g., membership on standing scientific review panels for VA or NIH proposals), and service as editor or associate editor of major peer-reviewed journals, service on scientific advisory boards (R&D, HSR&D, NIH, etc.).

Senior psychologist clinician investigators have achieved significant national professional recognition for research excellence and major scientific contributions. In addition to high level involvement in peer-reviewed research and other peer review activities, this recognition must be demonstrated by attainment of at least 4 the following: an extensive publication record in the nationally recognized peer-reviewed professional literature; a consistent record of presentation of findings at national scientific meetings; recognition by VA or NIH as a senior career scientist, e.g. Senior Research Career Scientist; an academic appointment at the affiliated medical school or local university at the rank of Full Professor or equivalent; and full responsibility for direction of a complex, multi-program clinical service or multiply funded research projects.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Ability to balance responsibilities in an extremely complex environment and to work with great autonomy.

*(2) Ability to independently create, organize, manage, and maintain high quality research programs.

*(3) Knowledge of budget control procedures that includes funding from multiple sources and may vary annually.

3. Senior Supervisory Psychologist. Senior supervisory psychologists have supervisory responsibility for subordinates and are responsible for all professional, management, and administrative

aspects of the service or organizational entity. Examples of positions are similar to those listed under the GS-14 supervisory psychologist heading, but at the GS-15 grade level, the size, scope, significance, and impact are greater.

Supervision and resource management involve major decisions, and work activities and supervision significantly impact the ability of staff to provide comprehensive services to veterans. The service or organizational entity is a major component of the medical center and the services or programs supervised are highly professional, technical, and complex. Responsibilities include oversight of a large, complex organization, always with 10 or more professional staff, that encompasses several component parts integral to the functioning of the medical center, or alternatively, 1 large service or organization. Decisions are made with very wide latitude and independent judgment.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Ability to effectively supervise and manage a large group of professional staff.

*(2) Ability to correctly assess qualifications and potential of current and prospective employees.

*(3) Ability to develop appropriate productivity standards for professional staff, often across multiple program lines.

(4) Skill in interpersonal relationships including conflict resolution and ability to work collaboratively with supervisors from other units.

*(5) Knowledge of the goals and objectives of the medical center and VISN and ability to communicate these to subordinates.

4. Psychologist Leadership Positions at the VISN or National Level. Senior leadership positions at the VISN or national level are characterized by their size, scope, and high level of complexity; have significant impact on the VHA mission; and are of significant importance to the VISN, etc. Examples of positions may be similar to those listed under the GS-14 Leadership positions heading; but, at the GS-15 grade level, the individual would have full responsibility for the program or programs and the size, scope, significance, and impact of the program(s) are greater. Psychologists at this level generally provide overall leadership, guidance, and direction for the VISN or national program or programs.

Directs a large, complex mental health, behavioral science, or other patient care program at the VISN or national level or may have responsibility for several programs at the VISN or national level. This level would include the Director of a national organizational development program. Psychologists in senior leadership positions at the VISN or national level will be graded at the GS-15 level when the duties and responsibilities exert a major and significant impact on the overall functioning of the organizational entity, i.e., the impact is VISN or VHA-wide. Duties are performed with wide latitude, exercising independent judgment and full, delegated autonomy. Responsibilities include overall planning, direction, and execution of the area of responsibility. The administrative or technical work is of exceptional difficulty and responsibility and consultation is provided to high level officials at the field, VISN, or national level.

PART II

APPENDIX G18

a. **Demonstrated Knowledge, Skills, and Abilities**

(1) Knowledge of, and ability to effectively communicate, existing policies and regulations.

* (2) Ability to develop and recommend new or revised policies that are consistent with organizational goals and objectives.

* (3) Skill in leading senior management officials in policy development.

* (4) Ability to influence high level officials in adoption of, and conformance to, performance measures, monitors, and other policy guidelines.

(5) Knowledge of, and ability to utilize, resource materials and to develop new materials when needed.

(6) Ability to communicate effectively orally and in writing with a diverse group of professional staff and management officials who are often at the highest management levels.

NOTE: Although examples of titles are offered in each section throughout this Standard, there is little standardization of titles, or duties associated with those titles, across VHA and psychologists hold leadership responsibilities that are known by a wide variety of titles within their individual facility, VISN, or national program. Such titles are to be considered as subsumed within one of the assignments described provided that the responsibilities meet the corresponding grade determining criteria.

4. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for psychologists in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrants such action based on demonstrated competence to meet the requirements of the proposed grade.

b. Under no circumstances will the educational or licensure requirements be waived.

c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

**APPENDIX G19. NUCLEAR MEDICINE TECHNOLOGIST
QUALIFICATION STANDARD
GS-601
Veterans Health Administration**

1. COVERAGE. The following are requirements for appointment as a nuclear medicine technologist in the Veterans Health Administration (VHA). Nuclear medicine technologists (NMTs) perform a wide variety of functional studies of organs and/or systems involving static and dynamic imaging procedures, the injection of radionuclides and radiopharmaceuticals, and the use of such specialized equipment as integrated computer/imaging systems, single photon emission tomography, etc., in combination with a variety of radioimmunoassay (in vitro) laboratory procedures on biological specimens. The work requires a professional knowledge of the field of nuclear medicine technology and those aspects of chemistry, physics, mathematics, and the biomedical sciences that relate to nuclear medicine.

2. BASIC REQUIREMENTS

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 chapter 3, section A, paragraph 3g, this part.)

b. **Certification.** All applicants must be certified in nuclear medicine technology by the Nuclear Medicine Technology Certification Board (NMTCB) or American Registry of Radiologic Technology (ARRT). NMTCB or ARRT (N) certification eligibility requirements are normally satisfied by one of the following: graduation from an educational program in nuclear medicine technology accredited by the Committee on Allied Health Education and Accreditation; or national certification as a registered medical technologist or registered radiologic technologist; or a bachelor's or associate's degree in one of the physical or biological sciences, and 4 years of clinical NMT experience.

NOTE: Candidates who have obtained NMTCB or ARRT certification in nuclear medicine through methods other than those listed above meet minimum requirements for GS-5.

c. **Exceptions.** Non-certified applicants who otherwise meet the eligibility requirements for NMTCB or ARRT (N) certification may be given a temporary appointment as a graduate NMT under the authority of 38 U.S.C. § 7405 (a) (1) (D). Failure to obtain certification during that period is justification for termination of the temporary appointment. This may result in termination of employment.

d. **Loss of Credential.** An employee in this occupation who fails to obtain licensure/certification/registration within the required time frame, or who fails to maintain the required licensure/certification/registration must be removed from the occupation, which may also result in termination of employment.

For occupations which require an active credential (licensure/certification/registration) at all grade levels, at the discretion of the appointing official, an employee may be reassigned to another occupation for which he/she qualifies if a placement opportunity exists. For occupations which require an active credential (licensure/certification/registration) in assignments above the full-performance level only, at

**PART II
APPENDIX G19**

the discretion of the appointing official, an employee may remain at an appropriate lower grade level in the occupation when both of the following apply: the credential is not a requirement and a placement opportunity exists.”

e. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/ registration requirements that apply to this occupation.

f. All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

(1) Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

(2) Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

(3) Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

g. 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.

h. Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

i. If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

j. **Physical Requirements.** See VA Directive and Handbook 5019.

k. **English Language Proficiency.** Nuclear medicine technologists must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS

a. Definitions

(1) **Creditable Experience.** Knowledge of Current Professional Nuclear Medicine Technology Practices. To be creditable, the experience must have required the use of knowledge, skills, abilities, and other characteristics associated with current professional nuclear medicine technology practice.

(2) **Quality of Experience.** Experience is only creditable if it is earned after passing the NMTCB or ARRT (N) certification exams. Experience as a graduate NMT is creditable provided the candidate was utilized as an NMT and subsequently passed the certification examination.

(3) **Part-Time Experience.** Part-time experience as a NMT is creditable according to its relationship to full-time workweek. For example, a NMT would receive 1 week of full-time credit for each 2 weeks of half-time work.

b. **Grade Determinations.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates.

(1) GS-5

(a) **Experience or Education.** None beyond the basic requirements. Reference basic requirements in paragraph 2.b. above. Candidates must demonstrate the following:

(b) Demonstrated Knowledge, Skills and Abilities

1. Knowledge of common nuclear medicine procedures and techniques.
2. Knowledge of the various diseases such as coronary artery disease, cancer, and thyroid disease.
3. Knowledge of routinely used radiopharmaceuticals for imaging.
4. Knowledge of radiation safety related to the general public, patient, and radiation worker.

(c) **Assignments.** Candidates at this grade level serve as staff NMTs. It is expected that they receive guidance from more experienced staff members for more complex patients and require daily direct supervision.

(2) GS-7

(a) **Experience.** Certification as described in the basic requirements in paragraph 2.b. above, or completion of 1 year experience equivalent to the next lower grade level directly related to the position to be filled, i.e., experience that demonstrates possession of the knowledge, skills, abilities, and other characteristics needed to provide nuclear medicine technology services at that level. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Advanced Entry Level Placement.** See VA Handbook 5005, Appendix G.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of Nuclear Regulatory Commission (NRC) regulations.
2. Knowledge of the medical sciences such as anatomy, physiology, chemistry, and physics and how they relate to the cardiovascular, skeletal, endocrine, respiratory, gastrointestinal, and genitourinary systems of the human body;
3. Knowledge of radioactive package types, package surveys, and radioactive materials record management.
4. Knowledge of exposure rate calculations.

(d) **Assignments.** Candidates at this grade level serve as a staff NMTs requiring minimal oversight. At this grade, NMTs utilize the proper methods of receipt, use, storage and disposal of radioactive material; perform and evaluate basic quality control on all imaging and non-imaging instrumentation and auxiliary equipment, and provide basic nursing care, recognizing and responding to emergency conditions.

(3) **GS-9**

(a) **Experience.** Completion of 1 year of experience equivalent to the next lower grade level directly related to the position to be filled, i.e., experience that demonstrates possession of the knowledge, skills, abilities, and other characteristics needed to provide nuclear medicine technology services at that level. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to document excessive radiation exposure in the working environment.
2. Knowledge of medical events requiring documentation and the ability to properly document them and make recommendations to the Radiation Safety Officer (RSO).
3. Ability to communicate orally and in writing post-therapy radiation safety precautions.
4. Ability to troubleshoot gamma camera and auxiliary equipment problems.
5. Ability to analyze computer generated data for technical quality and artifacts and initiate corrective measures.

(c) **Assignments.** Candidates at this grade level serve as staff NMTs. This is the full performance level for the NMT. It is expected that they receive guidance from higher-level or supervisory staff members for only the most complex patients.

(4) **GS-11**

(a) **Experience.** Completion of 1 year of experience equivalent to the next lower grade level directly related to the position being filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the potential to acquire the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to analyze consequences of improper packaging of radioactive material and take appropriate actions.
2. Ability to determine personnel needing personal monitoring devices, analyze personal monitoring results, and recommend corrective action, if needed.
3. Ability to analyze instances of increased radiation exposure levels and recommend measures to reduce.
4. Ability to calculate exposure rates.
5. Ability to properly document excessive radiation exposure.
6. Ability to develop new protocols for imaging procedures.
7. Skill in motivating and/or mentoring staff, if supervisory position.
8. Ability to develop continuing education standards, if supervisory position.
9. Skill in responding to any decrease in staffing or increase in workload involving all parties to restructure work assignments, if encumbering a supervisory position.

(c) **Assignments.** NMTs at this level may be senior-level practitioners in assigned areas, may be in lead positions, or may be encumbering a position that is supervisory in nature. 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.

(5) **GS-12**

(a) **Experience.** Completion of 1 year experience equivalent to the next lower grade level directly related to the position to be filled, i.e., experience that demonstrates possession of the knowledge, skills, abilities, and other characteristics needed to provide nuclear medicine technology and administrative services, and must fully meet the KSAs at that level. This experience must have provided the candidate with an in-depth knowledge of common and uncommon nuclear medicine procedures, in-depth knowledge of radiation

**PART II
APENDIX G19**

safety practices, and knowledge of staffing levels, financial management, personnel management, and supply management. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs as designated by an asterisk (*):

(b) **Assignments.** 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. Candidates at this grade level are to be in one of the following assignments:

1. Chief Nuclear Medicine Technologist. Individuals in this assignment assume full administrative and professional responsibility for planning and directing the nuclear medicine program at a medical center or independent outpatient clinic.

(a) Ability to provide complex nuclear medicine patient procedures;

*(b) Ability to develop and initiate new protocols which apply current research findings;

*(c) Skill in providing administrative reports to management orally and in writing.

2. Supervisory Nuclear Medicine Technologist. Individuals in this assignment assume full administrative and professional responsibility for planning and directing the nuclear medicine program at a medical center or independent outpatient clinic. They also have supervisory responsibility over a program.

*(a) Ability to assign and evaluate work of subordinate staff as well as resolve problems that may interfere with the delivery of nuclear medicine services by staff members;

(b) Skill in providing complex nuclear medicine patient procedures;

*(c) Ability to develop and initiate new protocols which apply to current research findings;

*(d) Skill in providing administrative reports to management orally and in writing.

*(e) Ability to interview candidates for positions in the section; recommend appointments, advancements, or, when appropriate, disciplinary actions; evaluate performance; and identify continuing education and training needs.

4. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for NMTs in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements of the proposed grade.

b. Under no circumstances will the certification requirements be waived.

MARCH 17, 2006

**VA HANDBOOK 5005/15
PART II
APENDIX G19**

c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

APPENDIX G20. DIETITIAN QUALIFICATION STANDARD
GS-630
Veterans Health Administration

1. COVERAGE. Following are requirements for appointment as a dietitian in the Veterans Health Administration (VHA). These requirements apply to all VHA dietitians in the GS-630 series.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified candidates in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Education.** The individual must have earned a minimum of a bachelor's degree from a U.S. regionally accredited college or university, and fulfilled each of the following criteria:

(1) Completed a didactic program in dietetics accredited by the Commission on Accreditation for Dietetics Education (CADE).

(2) Completed a CADE accredited supervised practice program.

(3) Passed a national examination administered by the Commission on Dietetic Registration (CDR), the credentialing branch of the American Dietetic Association (ADA).

c. **Registration**

(1) All applicants must be registered with the CDR.

(2) Non-registered applicants who otherwise meet the minimum requirements in the basic qualification standard may be appointed as a graduate dietitian under the authority of 38 U.S.C. § 7405 (a) (1) (D). Failure to obtain CDR registration during that period is justification for termination of the temporary appointment. This may result in termination of employment.

(3) **Loss of Credential.** An employee in this occupation who fails to obtain licensure/certification/registration within the required time frame, or who fails to maintain the required licensure/certification/registration must be removed from the occupation, which may also result in termination of employment.

For occupations which require an active credential (licensure/certification/registration) at all grade levels, at the discretion of the appointing official, an employee may be reassigned to another occupation for which he/she qualifies if a placement opportunity exists. For occupations which require an active credential (licensure/certification/registration) in assignments above the full-performance level only, at the discretion of the appointing official, an employee may remain at an appropriate lower grade level in the occupation when both of the following apply: the credential is not a requirement and a placement opportunity exists.”

d. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

**PART II
APPENDIX G20**

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

e. **Physical Requirements.** See VA Directive and Handbook 5019.

f. **English Language Proficiency.** Dietitians must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS**a. Definitions****(1) Creditable Experience**

(a) **Knowledge of Current Professional Dietitian Practices.** To be creditable, the experience must have required the use of knowledge, skills, abilities, and other characteristics associated with current professional dietetics practice. This may be evidenced by one or more of the following:

1. The equivalent of 1 year of active professional practice. Active professional practice means paid/non-paid employment as a registered dietitian.

2. Academic course work leading to an advanced graduate degree in nutrition or a related health care field.

(b) **Quality of Experience.** Experience is only creditable if it is post-registration experience as a registered dietitian directly related to the position to be filled, i.e., the clinical dietitian must have relevant clinical nutrition healthcare experience; the food service system dietitian must have relevant food service system management experience. Qualifying experience must also be at a level comparable to dietetic experience at the next lower level.

(c) **Part-Time Experience.** Part-time experience as a registered dietitian is credited according to its relationship to the full-time workweek. For example, a registered dietitian employed 20 hours per week, or on a half-time basis, would receive 1 full-time work week of credit for each 2 weeks of service.

(2) **Dietetic Internship Program (Supervised Practice Program).** Dietetic internship programs are post-baccalaureate degree programs that provide supervised practice experiences which meet the eligibility requirements and accreditation standards of the Commission on Accreditation for Dietetics Education of the American Dietetic Association. Completion of a coordinated program in dietetics fulfills the requirements of a supervised practice program. Time spent in a dietetic internship or supervised practice program does not qualify as creditable experience.

(3) **Fellowship.** Fellowship programs are typically advanced training programs of varying length in a specialized area of clinical practice. Applicants for these programs usually possess a master's degree.

(4) **Residency.** The dietetic residency is an 18-month combined academic and professional program. The resident, assigned to a VA medical center, performs dietetic duties including activities relating to the area in which graduate study is being taken. In addition, the resident attends graduate classes to satisfy the requirements for a master's degree in dietetics or an allied field.

b. **Grade Determinations.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates.

(1) **GS-7**

(a) **Experience or Education.** None beyond the basic requirements. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to provide nutrition counseling to patients, family members and/or caregivers considering psycho-social issues and age appropriate guidelines, and to communicate effectively with other health care professionals.

**PART II
APPENDIX G20**

2. Ability to plan and organize work consisting of multi-tasks and priorities under general supervision.
3. Basic knowledge of computer operations; software, hardware, terminology, security requirements, and capabilities.
4. Ability to synthesize nutritional assessment components to evaluate nutritional status and utilize principles of medical nutrition therapy using established practice standards and guidelines to deliver nutritional care.
5. Knowledge of basic food production and service which incorporates principles of sanitation, safety, and menu planning within a healthcare environment.
6. Knowledge of educational concepts, methods, training materials, and resources and the ability to implement existing education and training activities for Nutrition & Food Service employees.

(c) **Assignments.** Employees at this grade are closely supervised and competency with progressively complex tasks is monitored by supervisor. Employees at this grade level serve in a career development position.

(2) GS-9

(a) **Experience or Education.** At least 1 year of experience at the next lower level that demonstrates the core competencies described at that level, or education equivalent to 2 full years of progressively higher level graduate education, or master's or equivalent graduate degree from an accredited university or college in the field of dietetics or closely related field. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Ability to plan and organize work of considerable difficulty and responsibility under minimal supervision.

(c) **For Clinical Dietitian Positions, the following Knowledge, Skills, and Abilities must be demonstrated:**

1. Ability to participate in research and performance improvement studies.
2. Knowledge of, and ability to, apply the basic principles of enteral and parenteral nutrition support.
3. Knowledge of the principles and practices of clinical dietetics and medical nutrition therapy in order to plan, develop, and independently coordinate medical nutrition therapy intervention, interdisciplinary care plans, and nutrition education activities.

(d) **For Food Service Systems Management Dietitian Positions, the following Knowledge, Skills, and Abilities must be demonstrated:**

1. Knowledge of various food preparation and delivery systems.
2. Ability to conduct studies and document findings to evaluate staff, food, supplies, equipment, and service in order to improve the efficiency of the operation.
3. Knowledge of current food service systems management, principles, and practices within a healthcare environment.
4. Knowledge of educational concepts, methods, training materials, and resources and the ability to develop and conduct education and training programs for Nutrition & Food Service employees.

(e) **Assignments.** Employees at this grade level serve in either staff clinical or food service systems management dietitian positions. It is expected that they receive guidance from higher-level or supervisory staff members. Supervision is close for developmental assignments and more general in nature for assignments in which the individual has demonstrated competency.

(3) **GS-11**

(a) **Experience or Education.** At least 1 year of experience at the next lower level that demonstrates the core competencies described at that level, or education equivalent to 3 full years of progressively higher level graduate education, or a Ph.D. or equivalent doctoral degree from an accredited university or college in the field of dietetics or closely related field. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of basic investigative processes and techniques in order to participate in the design of studies, collect data, interpret findings, and translate results into written and oral communication.

(c) **For Clinical Dietitian Positions, the following Knowledge, Skills, and Abilities must be demonstrated:**

1. Knowledge of the principles and practices of clinical dietetics and medical nutrition therapy for patients with complex medical conditions in order to plan, develop, and coordinate medical nutrition therapy intervention, interdisciplinary care plans, and nutrition education activities.

2. Knowledge of complex areas of clinical nutrition including management of critically ill and malnourished patients, and ability to apply medical nutrition therapy to patients with multiple comorbidities.

3. Ability to act as a mentor/consultant for health care providers including registered dietitians, dietetic interns, nurses, physicians, medical students, and allied health professionals.

(d) **For Food Service Systems Management Dietitian Positions, the following Knowledge, Skills, and Abilities must be demonstrated:**

**PART II
APPENDIX G20**

1. Ability to direct food service and production with focus on customer acceptance and budgetary guidelines to include principles of menu planning, food purchasing, delivery schedules, and ability to estimate food quantities.
2. Ability to develop and maintain a system of internal reviews and direct quality control and performance improvement studies to ensure that programs within the nutrition and food service operate at the optimum level of effectiveness and assure compliance with various accrediting, regulatory, and agency authorities.
3. Knowledge of computer software programs and problem solving techniques relative to food service systems management.
4. Knowledge of the principles of management required to establish program goals and objectives, to plan and administer a program, coordinate associated activities, evaluate program accomplishments, redefine priorities, and modify objectives.

(e) For food service systems management supervisory positions, experience must also demonstrate the:

1. Ability to manage/supervise, i.e., plan, organize, delegate, direct, control, and review activities of groups of non-professional employees.
2. Knowledge of the principles of management and staff development required to establish goals and objectives, control, coordinate, motivate and evaluate training activities of the department, administer and monitor activities, evaluate outcomes/accomplishments, redefine priorities, modify goals/objectives and implement changes in processes/systems, as needed, in specified area of supervisory control.
3. Ability to assess competence, evaluate, and monitor the continuing education needs of non-professional staff.

(f) **Assignments.** Employees at this grade level serve as staff dietitians at the full performance level, and may or may not be in a food service systems management supervisory position.

(4) GS-12

(a) **Experience.** Completion of 1 year of experience equivalent to the next lower grade level directly related to the position being filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designed by an asterisk (*):

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of more complex investigative processes and techniques in order to direct or participate in the design of studies, collect data, conduct statistical analysis, interpret findings, and translate results into written and oral communication.

*2. Knowledge of, and ability to, apply quality standards as specified by regulatory and accrediting organizations.

*3. Knowledge of the principles of program management and oversight required to develop program goals and objectives, administer and monitor program, coordinate associated activities, evaluate program outcomes/accomplishments, redefine priorities, modify goals/objectives and implement changes in processes/systems as needed.

*4. Ability to assess competence, evaluate, and monitor the continuing education needs of professional staff.

5. Ability to set priorities, delegate tasks, meet multiple deadlines, analyze organizational problems, and develop and implement effective solutions.

*6. Knowledge of human resources administration, including such functions as the ability to interview and select qualified applicants, monitor and evaluate performance, and maintain effective labor management relations within scope of responsibility.

*7. Ability to manage/supervise, i.e., plan, organize, delegate, direct, control, review activities of groups of professional subordinates.

(c) In addition to the knowledge, skills, abilities, and other characteristics described above, the dietetic internship director must also demonstrate the following:

1. Knowledge of, and ability to, design the dietetic internship curriculum to meet accreditation requirements established by the accrediting agency of the American Dietetic Association (ADA).

*2. Ability to ensure curriculum meets and remains current with accreditation standards and is compatible with regulations and procedures for associated health trainees established by the VHA Office of Academic Affiliations.

3. In depth knowledge of current practice in food service systems management, nutrition therapy, community nutrition practice, and business/entrepreneurial dietetics with the ability to integrate learning experiences in didactic and practice components of the internship.

*4. Ability to design and implement an evaluation system to assess clinical competency of dietetic interns.

*5. Ability to establish and coordinate practice experiences at affiliated sites.

*6. Ability to provide and coordinate the didactic component of the internship program.

(d) Assignments. 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. Registered dietitians at this grade level are to be in one of the following assignments:

**PART II
APPENDIX G20**

1. Clinical Nutrition Manager/Clinical Program Manager. A clinical nutrition manager/clinical program manager serves as a supervisory dietitian with primary responsibility for high-level professional and management support of clinical nutrition program activities, or a specialized clinical program. He/she integrates clinical functions with other sections of the nutrition and food service, other services and units within the medical center, hospital and community based clinics, and the local community. In addition to completion of 1 year of creditable experience comparable to the next lower grade level which is directly related to the position to be filled, registered dietitians assigned to these positions must demonstrate the knowledge, skills, abilities, and other characteristics necessary to satisfactorily complete the following duties:

a. The full range of supervisory duties. This includes, but is not limited to, responsibility for assignment of duties; development of performance standards and performance evaluations; recommendations for appointments, awards, advancements, and, when appropriate, disciplinary actions; and identification of continuing education and training needs.

b. Serving as a consultant within the nutrition and food service and with other facility health care staff in evaluating health care delivery to patients.

c. Assessing, planning, and evaluating the clinical nutrition program to ensure proper coordination between the delivery of clinical nutrition services and the overall delivery of health care.

2. Food Service Systems Manager. A food service systems manager serves as a supervisory dietitian or with primary responsibility for high level professional and management support of patient meal service, which includes food production and food service activities that are either self-operated or operated through contractual agreements. The food service systems manager may interface with a contractual provider when appropriate and interfaces with the clinical nutrition program to ensure that services provided reflect the nutritional needs of the patient. In addition to completion of 1 year of creditable experience comparable to the next lower grade level directly related to the position to be filled, registered dietitians assigned to these positions must demonstrate the knowledge, skills, abilities, and other characteristics necessary to satisfactorily complete the following duties:

a. The full range of supervisory duties. This includes, but is not limited to, responsibility for assignment of duties; development of performance standards, and performance evaluations; recommendations for appointments, awards, advancements, and, when appropriate, disciplinary actions; and identification of continuing education and training needs.

b. Serving as a consultant within the nutrition and food service and with other facility health care staff in evaluating health care delivery to patients.

c. Assessing, planning, and evaluating the food service systems management program to ensure proper coordination between the delivery of patient meal service and the overall delivery of health care.

d. Ability to develop financial goals, manage a budget and organize and/or maintain a cost accounting system to forecast expenditures based on current spending patterns; provide estimates for planning and adjustments as program and resources change.

3. Program Coordinator. The dietitian program coordinator provides management, professional, and technical support in planning, organizing, and coordinating specific aspects of the nutritional care program for multiple sites, or is responsible for multiple aspects of the nutritional care and food service program, which may include, but is not limited to, clinical nutrition management, quality management coordination, food safety coordination, food service system computer coordination, or any combination thereof. The dietitian program coordinator does not have supervisory responsibilities but is responsible for broad program management. In addition to completion of 1 year of creditable experience comparable to the next lower grade level directly related to the position to be filled, registered dietitians assigned to these positions must demonstrate the knowledge, skills, abilities, and other characteristics necessary to satisfactorily complete the following duties:

- a. Performs, under general administrative supervision with wide latitude for the exercise of independent judgment, work of unusual difficulty and responsibility.
- b. Serves as a consultant within the nutrition and food service and with other facility health care staff in evaluating health care delivery to patients.
- c. Plans and coordinates activities covering a broad range of the nutrition and food service programs at individual or multiple sites.

4. Dietetic Internship Director. A dietetic internship director has full responsibility for administering all aspects of a VA-sponsored accredited dietetic internship program which includes the overall planning, directing, and administering of the accredited post-baccalaureate degree dietetic internship program at a medical center, and ensures eligibility requirements and accreditation standards of the Commission on Accreditation for Dietetics Education of the American Dietetic Association (CADE) are met. Consistent with CADE standards, individuals assigned as dietetic internship director must possess a minimum of a master's degree. In addition to completion of 1 year of creditable experience comparable to the next lower grade level directly related to the position to be filled, a registered dietitian assigned to this position must also demonstrate the knowledge, skills, abilities, and other characteristics necessary to satisfactorily complete the following duties:

- a. Performs, under general administrative supervision with wide latitude for the exercise of independent judgment, work of unusual difficulty and responsibility including the full range of supervisory duties for a small internship program.
- b. Serves as a consultant within the nutrition and food service and with other facility health care staff regarding current nutrition and food service systems management issues, evaluating health care delivery to patients, and designing nutrition related research initiatives.
- c. Provides professional and administrative guidance and supervision to dietetic interns and surveillance of all aspects of the program. Coordinates and directs the staff dietitians participating in the clinical and administrative phases of the program.

**PART II
APPENDIX G20****(5) GS-13**

(a) **Experience.** Completion of 1 year of experience equivalent to the next lower grade level directly related to the position being filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designed by an asterisk (*):

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of, and skill in applying, the theories and practices of clinical nutrition and food service systems management sufficient to resolve complex, controversial, or precedent-setting matters.

2. Demonstrated skill in making decisions on problems presented by subordinate supervisors, team leaders, or other personnel.

3. Skill and ability to effectively communicate and advise senior management officials.

*4. Ability to evaluate subordinate supervisors or leaders and serve as the reviewing official on evaluations of non-supervisory employees rated by subordinate supervisors.

(c) **In addition to the knowledge, skills, abilities, and other characteristics described above, the dietetic internship director must also demonstrate the following:**

*1. Ability to provide and coordinate the didactic component of the internship program including graduate level course instruction.

2. Knowledge of broad functional areas of dietetics, education, and in-depth knowledge in specialized areas including research methodology.

*3. Ability to provide direction and guidance for all research projects submitted by dietetic interns to the facility's and/or affiliated site's Institutional Review Board (IRB).

(d) **Assignments.** 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. Individuals in these assignments have full responsibility for planning and implementing special programs characterized by one of the following areas:

1. Clinical Nutrition Manager or Food Service Systems Manager over multiple sites. A clinical nutrition manager or food service systems manager serves as a supervisory dietitian with primary responsibility for high-level professional and management support of clinical nutrition program, or food service systems activities that encompass two or more medical center facilities (including consolidated medical centers), and integrating the clinical or food service system management functions with the medical centers, with other sections within the nutrition and food service, other services and units in the medical center, clinics, and local community. In addition to completion of 1 year of experience comparable to the next lower grade level, registered dietitians assigned to these positions must demonstrate the knowledge, skills, abilities, and other characteristics necessary to satisfactorily complete the following duties:

a. The full range of supervisory duties. This includes responsibility for assignment of duties; development of performance standards and performance evaluations; recommendations for appointments, awards, advancements, and, when appropriate, disciplinary actions; and identification of continuing education and training needs, etc.

b. Serving as a consultant within the nutrition and food service and with other facility(s) health care staff in evaluating health care delivery to patients.

c. Assessing, planning, and evaluating the clinical nutrition program or foodservice systems program to ensure proper coordination between the delivery of clinical nutrition services and the overall delivery of health care.

2. Dietetic Internship Director. A dietetic internship director has full responsibility for administering all aspects of a VA sponsored accredited dietetic internship program which includes the overall planning, directing, and administering of an accredited post-baccalaureate degree dietetic internship program at a medical center affiliated with a university offering graduate credit or a master's degree. In accordance with national eligibility requirements and accreditation standards of the Commission on Accreditation for Dietetics Education of the American Dietetic Association, individuals assigned as dietetic internship director must possess a minimum of a master's degree. On occasion, when required by the coordinating educational institution a doctoral degree may be required. In addition to completion of 1 year of experience comparable to the next lower grade level, a registered dietitian assigned to this position must also demonstrate the knowledge, skills, abilities, and other characteristics necessary to satisfactorily complete the following duties:

a. Performs, under broad administrative direction with wide latitude for independent judgment, work of unusual difficulty and responsibility requiring extended professional training and experience, which has demonstrated leadership and marked attainments in the profession.

b. The full range of supervisory duties for a medium to large internship program. This includes responsibility for assignment of internship duties of professional/non-professional staff and interns, development of a performance evaluation system, selection or appointment of dietetic interns, disciplinary actions, and identification of education and training needs, etc.

c. Serves as a consultant within the nutrition and food service and with other facility health care staff regarding current nutrition and food service systems management issues, evaluating health care delivery to patients, and designing nutrition related research initiatives.

d. Provides professional and administrative guidance and supervision to dietetic interns and maintains surveillance of all aspects of the program. Coordinates and directs the staff dietitians participating in the clinical and administrative phases of the program.

e. Teaches and/or coordinates graduate level courses associated with the curriculum.

**PART II
APPENDIX G20****4. SERVICE CHIEFS AND ASSISTANT SERVICE CHIEFS**

a. **Service Chief.** Individuals assigned as service chiefs must have at least 1 year of creditable experience comparable to the next lower grade level. The experience must evidence possession of supervisory and management skills. Individuals assigned as service chiefs have full responsibility for managing and supervising all phases of nutrition and food service operations.

b. **Assistant Service Chief.** Assignment as an assistant chief is restricted to those serving as a full assistant to the chief. Assistant chiefs are to share, with the chief, full responsibility for managing and supervising all phases of nutrition and food service operations. The assistant service chief is to be 1 grade less than the appropriate grade of the chief.

c. Grade Levels**(1) GS-13**

(a) **Experience.** Completion of 1 year of experience equivalent to the next lower grade level directly related to the position being filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designed by an asterisk (*):

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of clinical nutrition and principles of medical nutrition therapy sufficient to direct the clinical nutrition section at multiple sites, and the ability to coordinate clinical nutrition needs of patients with the administrative section (food production and service) at multiple medical centers, including consolidated facilities.

2. Knowledge of, and ability to, apply appropriate standards as specified by regulatory and accrediting organizations at multiple medical centers, including consolidated facilities.

3. Knowledge of the principles of management required to establish program goals and objectives, to plan and administer a program, coordinate associated activities, evaluate program accomplishments, redefine priorities, and modify objectives at multiple medical centers, including consolidated facilities.

*4. Ability to manage/supervise, i.e., plan, organize, delegate, direct, control, and review the activities of groups of subordinates that have diverse functions at multiple medical centers, including consolidated facilities.

*5. Ability to assess the clinical competence, and evaluate and monitor the continuing education needs of professional staff at multiple medical centers, including consolidated facilities.

*6. Ability to act as a mentor/consultant for health care providers including registered dietitians, dietetic interns, nurses, physicians, and allied health professionals at multiple medical centers, including consolidated facilities.

(c) **Assignments.** Employees at this level typically serve as an assistant chief for the nutrition and food service at a large facility, or a service chief at a small to mid-size facility. 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.

(2) **GS-14**

(a) **Experience.** Completion of 1 year of experience equivalent to the next lower grade level directly related to the position being filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designed by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to perform, under administrative direction, with wide latitude for the exercise of independent judgment, work of unusual difficulty and responsibility.

2. Ability to plan and coordinate activities covering a broad range of nutrition and other programs involving multiple departments and/or facilities.

*3. Ability to serve as a recognized expert to provide authoritative advice and coordination of nutrition care programs that may encompass multiple medical centers, including consolidated facilities or departments.

(c) **Assignments.** Employees at this level typically serve as the Chiefs of Nutrition and Food Support Service at VA medical centers that are in the highest complexity level category for VHA facilities, and which are affiliated, tertiary care facility/health care systems with comprehensive research programs. The Chief is a member of the senior leadership team providing advice for inclusion in integrated care programs for veterans with multiple diagnoses, ages, and other needs; and management planning to achieve medical center, VISN, and national goals. The Chief of Nutrition and Food Support is the highest level professional position within the organization for the management and direction of the nutrition and food support program and services. 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.

5. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for dietitians in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements of the proposed grade.

b. Under no circumstances will the educational or registration requirements be waived.

c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

APPENDIX G21. KINESIOTHERAPIST QUALIFICATION STANDARD
GS-635
Veterans Health Administration

1. COVERAGE. This standard applies to all kinesiotherapist (KT) positions in the Veterans Health Administration (VHA). The work requires the application of knowledge of the concepts, principles, and practices of kinesiotherapy and the use of therapeutic corrective exercises to maintain or improve the general state of health of patients by preventing muscular deterioration, conserving and increasing strength, maintaining function, and retaining mobility. Kinesiotherapists evaluate the history of patients by interviews, tests, and measurements and use such findings and the therapy orders of physicians to develop and implement kinesiotherapy programs for individual patients. These teaching activities are directed toward achieving therapeutic objectives such as instructing patients in ambulation and educating patients to develop skill and understanding in activities of daily living.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified citizens in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Education.** A bachelor's degree in kinesiotherapy, or exercise science with an emphasis in kinesiotherapy, from an accredited college or university. This education must have included or been supplemented by clinical practice in a VA approved training program or its equivalent.

NOTE: This VA approved or equivalent training program is the transitory period between an academic environment and the medical environment which enables the student to apply textbook knowledge as a professional kinesiotherapist in an actual medical treatment situation. Graduates prior to May 1, 1998, completed didactic and clinical curricula approved by the Council on Professional Standards for Kinesiotherapy (COPS-KT, Inc.). Graduates from May 1, 1998, to the present have completed a didactic and clinical curricula approved by the Committee on Accreditation of Education Programs for Kinesiotherapy (CoA-KT). As of May 1, 2001, all recognized Kinesiotherapy programs are accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP).

c. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/ registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

**PART II
APPENDIX G21**

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

d. **Physical Requirements.** See VA Directive and Handbook 5019.

e. **English Language Proficiency.** Kinesiotherapists must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS**a. Definitions**

(1) **“Affiliated”** means affiliated for the purposes of health care training.

(2) **Creditable Experience - Knowledge of Professional Kinesiotherapy Practice.** To be creditable, the experience must demonstrate possession of the knowledge, skills, abilities, and other characteristics associated with current kinesiotherapy practice as outlined in the current scope and standards of practice for kinesiotherapy. One or more of the following may have evidenced this:

a. The equivalent of 1 year of active practice. Active practice means paid/non-paid employment as a kinesiotherapist as defined by COPS-KT.

b. Academic course work leading to an advanced degree in kinesiotherapy or exercise sciences.

(3) **Part-Time Experience.** Part-time experience as a professional KT is credited according to its relationship to the full-time workweek. For example, a KT would receive 1 week of full-time credit for each 2 weeks of half-time work.

(4) **Graduate Education.** Graduate degrees may be substituted for experience through the GS-11 level. Graduate degrees must be from a college or university that was regionally or nationally accredited at the time the candidate completed the program. To substitute the graduate degree, it must have been completed after the individual met the basic requirements for appointment.

(5) **Content Specialty.** Specialized content areas of kinesiotherapy include, but are not limited to, geriatrics, cardiopulmonary, orthopedics, driver training, traumatic brain injury (TBI), spinal cord injury (SCI), and Preservation-Amputation Care and Treatment (PACT).

b. **Grade Determination.** In addition to the basic requirements, the following criteria must be used when determining the appropriate grade assignment of candidates.

(1) **GS-7**

(a) **Experience.** None beyond the basic requirements.

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of kinesiology, physiology, anatomy, psychology, exercise physiology, and pathological conditions.

2. Knowledge of treatment goals.

3. Knowledge of medical terminology and written documentation.

4. Ability to make recommendations regarding treatment.

(c) **Assignment.** Individuals at this grade level serve as developmental staff KT's. They are responsible for examination, evaluation, treatment intervention, and prevention of musculoskeletal, neuromuscular, cardiopulmonary, and integumentary impairments, functional limitations, and disabilities in most patients. It is expected that they receive guidance from more experienced staff members for both routine and the more complex patients.

(2) **GS-9**

(a) **Experience or Education.** Completion of 1 year of experience equivalent to the next lower grade level or completion of at least two full years of progressive graduate education or a masters degree in a field directly related to the position. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of policies and procedures of kinesiotherapy.

2. Knowledge of assistive devices to make recommendations, including fit and function of assistive devices.

**PART II
APPENDIX G21**

3. Skill in applying therapeutic techniques.
4. Skill in instructing patients and families in a meaningful exercise program.
5. Ability to recognize an appropriate prosthesis for the patient.

(c) **Assignment.** Individuals at this grade level serve as staff KTs. They are responsible for examination, evaluation, treatment intervention, and prevention of musculoskeletal, neuromuscular, cardiopulmonary, and integumentary impairments, functional limitations, and disabilities in most patients. It is expected that they receive guidance from more experienced staff members for the most complex patients.

(3) GS-10

(a) **Experience.** Completion of 1 year of experience equivalent to the next lower grade level. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge and understanding of highly specialized complex evaluations and diagnostic tests and procedures.
2. Ability to properly assess a wide variety of patients having diverse and multiple disabilities to make recommendations for assistive devices.
3. Knowledge of teaching methods and learning principles, employing unusual motivational techniques and tact.
4. Ability to recognize an appropriate prosthesis for the patient, making adaptations and modifications without supervisory guidance or review.
5. Skill in coordinating treatment with other professionals to ensure patient compliance.
6. Ability to plan, direct, and distribute work assignments to KTs at lower grade levels.

(c) **Assignments.** This is the full performance level for the KT. Typical assignments at this grade level include but are not limited to:

1. **Staff Kinesiotherapist.** Individuals in this assignment may serve as the sole KT at a medical center or an outpatient clinic. There may be more than one KT at the facility; however, individuals in this assignment serve as a member of or consultant to a multidisciplinary or specialty care team.

2. **Lead Kinesiotherapist.** Individuals in this assignment serve as a consultant and educator to less experienced staff members. Typical assignments include, but are not limited to, providing technical oversight necessary for accomplishing the work of the organizational unit; planning, directing, and distributing the work to lower level KTs and/or other rehabilitation assistants; providing feedback to

supervisor on technical aspects of work; resolving informal employee complaints; instructing and training KT's on new equipment and/or procedures; and independently performing treatment on more complex patient issues.

(4) **GS-11**

(a) **Experience.** Completion of the equivalent of 1 year of experience equivalent to the next lower grade level or education equivalent to three full years of progressively higher level graduate education or a Ph.D. or comparable doctoral degree in a field directly related to the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

*1. Ability to perform lead and/or supervisory duties for assigned employees.

2. Knowledge of educational clinical training programs for KT students and interns.

*3. Ability to independently develop, plan, and administer clinical training programs.

*4. Ability to act as consultant and mentor in evaluating and treating patients in specialty and program areas.

5. Knowledge of highly specialized and complex treatments to act as a subject matter expert in the kinesiotherapy field.

(c) **Assignments.** 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. Typical assignments for candidates at this grade level include but are not limited to:

1. **Staff KT (Clinical Specialist).** Individuals at this level have duties that typically include at least 3 of the following: serving as a subject matter expert in the content specialty area and as a consultant to kinesiotherapy and other medical center staff in evaluating and treating patients in the specialty area; serving as a mentor to other therapists evaluating and treating patients in the content specialty or program area; providing in-service and clinical training programs in the content specialty or program area.

2. **Supervisory Kinesiotherapist.** Functions as a first-line supervisor and is typically responsible for assessing, planning, and delivering care within a special program or component of a kinesiotherapy department, e.g., SCI, Preservation-Amputation Care and Treatment (PACT), Cardiopulmonary Program Manager, etc., or to the KT section. Plans work schedules to assure an even flow and distribution of work; explains work requirements and assigns work; sets deadlines and priorities; recommends methods to improve work quality and productivity; reviews the work of staff supervised; directs training for employees; advises employees of the performance requirements of their positions; keeps them informed of their progress in meeting these requirements; and prepares formal evaluations of employee performance.

**PART II
APPENDIX G21**

3. Lead Kinesiotherapist. Functions as a Lead KT for lower level staff who provide the full range of KT assignments. Typical duties include, but are not limited to, providing technical oversight necessary for accomplishing the work of the organizational unit; planning, directing, and distributing the work to KTs and/or other lower level rehabilitation staff; providing feedback to supervisor on technical aspects of the work; resolving informal employee complaints; instructing and training KTs on newly acquired equipment; leading treatment teams in review of outcomes data and special reports and assisting in initiating action for improvement of team processes and specific care activities.

(5) GS-12

(a) **Experience.** Completion of 1 year of experience equivalent to the next lower grade level, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) Demonstrated Knowledge, Skills, and Abilities

*1. Demonstrated ability to supervise, motivate, and effectively manage staff to include organizing work, setting priorities, and delegating tasks and responsibilities.

*2. Ability to identify group dynamics, objectively observe, and modify behaviors.

3. Ability to disseminate appropriate information through various media as a consultant or mentor.

4. Skill in interpersonal relationships in dealing with employees, other team leaders, and managers.

5. Knowledge of specialized programs, and the ability to perform the administrative duties of special programs and/or components of a KT section.

6. Knowledge of decision making principles necessary to adjust programs on a day-to-day basis, to develop short term and long range goals, and/or to plan for future utilization of human resources, and the reassignment of staff to enhance/develop the value of existing or new programs.

(c) **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. KTs at this grade level may be appointed to one of the following assignments:

1. Supervisory KT. Functions in a supervisory position for a multidisciplinary professional staff assuring that a complete range of skills are available for a diverse patient population at active, affiliated medical centers or outpatient clinics. Has full supervisory responsibility for a staff that may include clinical specialists, lower level supervisory or lead KT positions, or program managers. At this level, the kinesiotherapy program typically includes a variety of specialties, an extensive educational program, and involvement in research activities. Evaluates new products and equipment, making recommendations concerning upgrades/new purchases that would improve operations. Informs higher level management of

anticipated staffing variances and recommends promotions, reassignments, or other personnel changes such as retention or release of probationary employees. Recommends recognition of superior performance when applicable.

2. Lead KT. Functions as a Lead KT and is principally responsible for a full range of clinical and administrative functions associated with the daily operation of a specific KT program, ensuring that physician referrals for rehabilitation assignments are processed, treatments are provided, and documentation is completed according to the Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and service policies. At this level, the employee coordinates and leads a multidisciplinary professional staff to assure that a complete range of skills is available for a diverse patient population who have varying degrees of highly complex physical and/or mental problems. Plans, develops, leads, and administers programs/clinics on restorative and intermediate wards, long term care, psychiatry, chemical dependency and outpatients, and acute medical, surgical, and chronic psychiatric ward programs. Leads ongoing specialized programs and modalities that are beyond the general practice of KT such as prosthetics/amputees, therapeutic swimming, pneumatic compression therapy, pressure gradient stocking measurements, and whirlpool therapy.

4. DEVIATIONS

- a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for kinesiotherapists in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements of the proposed grade.
- b. Under no circumstances will the educational requirements be waived.
- c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

**APPENDIX G22. OCCUPATIONAL THERAPY ASSISTANT QUALIFICATION STANDARD
GS-636
Veterans Health Administration**

1. COVERAGE. This standard applies to all occupational therapy assistant (OTA) positions in the Veterans Health Administration (VHA). Under the supervision of an occupational therapist, the OTA provides rehabilitative services to persons with mental, physical, emotional, or developmental impairments. The ultimate goal is to improve clients' quality of life and ability to perform activities of daily living. The OTA participates with the occupational therapist in planning and implementing complex treatment programs and applies occupational therapy procedures to patients under the general supervision of an occupational therapist.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified citizens in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Education.** Successful completion of an associate's degree in occupational therapy from a college or university accredited by the Accreditation Council for Occupational Therapy Education (ACOTE) of the American Occupational Therapy Association (AOTA).

c. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

**PART II
APPENDIX G22**

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

d. **Physical Requirements.** See VA Directive and Handbook 5019.

e. **English Language Proficiency.** OTAs must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS**a. Definitions**

(1) **Creditable Experience.** To be creditable, the experience must have required the use of knowledge, skills, abilities, and other characteristics (KSAs) (also referred to as core competencies), associated with the scope of OTA practice.

(2) **Part-time Experience.** Part-time experience as an OTA is credited according to its relationship to the full-time workweek. For example, an OTA would receive 1 week of full-time credit for each 2 weeks of half-time work.

b. **Grade Determination.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates.

(1) GS-4

(a) Experience. None beyond the basic requirements.

(b) Demonstrated Knowledge, Skills, and Abilities

1. Ability to review patient data and make a preliminary determination of their needs.

2. Ability to obtain subjective history.

3. Ability to interpret information gained through subjective history.

4. Ability to communicate with health care providers, patients, and staff for optimal patient care.

(c) **Assignment.** Employees at this grade level serve as staff OTAs. It is expected that they receive guidance from more experienced staff members for more complex patient issues and require daily direct insight supervision by the treating occupational therapist.

(2) **GS-5**

(a) **Experience.** In addition to the basic requirements, 6 months of experience comparable to the next lower grade level. Experience may have been gained as an OTA, rehabilitation aide, technician, volunteer, or in the medical health services field. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to assist in the development of treatment goals/objectives.
2. Ability to implement a patient care plan incorporating activity analysis theory.
3. Skill in written communication to document preliminary data, progress/change in status, discharge status, and patient or caregiver education.
4. Knowledge of basic group techniques and interpersonal communications.
5. Ability to assist in the use of standardized assessment tools to the area of practice assigned.

(c) **Assignment.** Employees at this grade level serve as staff OTAs. It is expected that they receive guidance from more experienced staff members for more complex patient issues and require daily and direct contact at the site of work from the assigned supervisor.

(3) **GS-6**

(a) **Experience.** In addition to the basic requirements, 1 year of experience comparable to the next lower grade level. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of a variety of standardized assessment tools in order to provide a more comprehensive intervention under the supervision of an occupational therapist.
2. Ability to use problem-solving skills when providing therapeutic interventions for patients who have a wide range of diagnoses and disabilities.
3. Ability to provide complex/multi-step instructions to patients, caregivers, and other health care professionals adapting instructions to meet the learning needs of the individual.
4. Ability to promote occupational therapy services effectively, providing training and interventions within the assigned areas.

(c) **Assignment.** Employees at this grade level serve as staff OTAs, receiving little to no guidance from more experienced staff members for more complex patient issues and require general supervision by the treating occupational therapist.

**PART II
APPENDIX G22****(4) GS-7**

(a) **Experience.** In addition to the basic requirements, 1 year of experience comparable to the next lower grade level. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Ability to utilize more complex therapeutic techniques and interventions, utilizing problem-solving skills, to maximize patient's functional status.
2. Ability to modify and adapt therapeutic interventions for simple and complex cases with a wide range of diagnoses and disabilities.
3. Ability to identify and recommend complex adaptive and assistive devices and durable medical equipment.

(c) **Assignment.** Employees at this grade level serve as staff OTAs. This is the full performance level for the OTA requiring routine and less frequent supervision. Assignments include: supervising OTA students, and overseeing their clinical training experiences at the technical level of education; providing department in-service training; and providing caregiver and home management training to patients and families. OTAs at this level receive minimum guidance from the occupational therapist.

(5) GS-8

(a) **Experience.** Completion of 1 year of creditable experience comparable to the next lower grade level is required, and must fully meet the KSAs at the next lower level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of specialized skills in the assigned area of practice.
2. Superior skills in the utilization of assessment tools and intervention techniques.
- *3. Ability to utilize complex/multi-step instructions with patients, caregivers, and other health care professionals and adapt those instructions according to the learning styles of the trainees or individuals receiving the instructions.
4. Ability to effectively promote occupational therapy services and provide training within the assigned areas, medical center-wide and off station.

(c) **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. Employees at this grade level serve as senior OTAs. Candidates for

assignment at this level must possess and demonstrate a level of clinical competence to serve as a consultant to other OTAs. Typical assignments for candidates at this grade level include, but are not limited to, 1 or more of the following:

1. Coordinating occupational therapy programming within single or multiple specialized clinical programs with advanced skills in physical and/or psychosocial dysfunction.
2. Serving as a Team Leader or Lead OTA.
3. Coordinating overall clinical experiences and training for OTA students, to include developing training plans, scheduling rotation assignments, providing feedback on students' performance, and participating in clinical training education for OTA students.

4. DEVIATIONS

- a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for OTAs in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements on the proposed grade.
- b. Under no circumstances will the educational requirements be waived.
- c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

APPENDIX G23. PHYSICAL THERAPY ASSISTANT QUALIFICATION STANDARD
GS-636
Veterans Health Administration

1. COVERAGE. This standard applies to all physical therapy assistant (PTA) positions in the Veterans Health Administration (VHA). Under the supervision of a physical therapist, the PTA provides services that promote the prevention, remediation, and rehabilitation of acute and chronic physical dysfunction. The PTA participates with the physical therapist in planning and implementing complex treatment programs and applies physical therapy procedures to patients under the general supervision of a Physical Therapist.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified citizens in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Education.** Successful completion of an associate's degree from an accredited community college, junior college, college, or university in a physical therapy assistant education program accredited by the Commission on Accreditation in Physical Therapy Education (CAPTE).

c. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

- Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.
- Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.
- Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

**PART II
APPENDIX G23**

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

d. **Physical Requirements.** See VA Directive and Handbook 5019.

e. **English Language Proficiency.** PTAs must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS**a. Definitions**

(1) **Creditable Experience.** To be creditable, the experience must have required the use of knowledge, skills, abilities, and other characteristics (KSAs), also referred to as core competencies, associated with the scope of PTA practice.

(2) **Part-Time Experience.** Part-time experience as a PTA is creditable according to its relationship to the full-time workweek. For example, a PTA would receive 1 week of full-time credit for each two 2 weeks of half-time work.

b. **Grade Determination.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates.

(1) GS-4

(a) **Experience.** None beyond the basic requirements.

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to perform chart review.

2. Ability to obtain subjective history.

3. Ability to interpret information gained through subjective history.

4. Ability to communicate verbally and in writing with the patient, the physical therapist, health care providers, and others.

(c) **Assignment.** Employees at this grade level serve as staff PTAs. It is expected that they receive guidance from more experienced staff members for more complex patients and require direct supervision by the treating physical therapist.

(2) **GS-5**

(a) **Experience.** In addition to the basic requirements, 6 months of experience comparable to the next lower grade level. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to assess changes in physical, mental, and/or medical status.
2. Knowledge of treatment techniques needed to assess changes in physical, mental, and/or medical status.
3. Ability to recognize individual and cultural differences and respond appropriately in all aspects of physical therapy services.

(c) **Assignment.** Employees at this grade level serve as staff PTAs. It is expected that they receive guidance from more experienced staff members for more complex patients and require direct supervision by the treating physical therapist.

(3) **GS-6**

(a) **Experience.** In addition to the basic requirements, 1 year of experience comparable to the next lower grade level. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

- a. Knowledge of evidence based physical therapy practice.
- b. Knowledge of physical therapy data collection and ongoing assessment techniques in order to perform specified aspects of patient evaluation and interventions.
- c. Knowledge of basic biological and medical science to assess patient data; make a preliminary determination of their needs; develop treatment goals and objectives; and implement patient treatment plans.

(c) **Assignment.** Employees at this grade level serve as staff PTAs receiving little to no guidance from more experienced staff members for more complex patients and require general supervision by the treating physical therapist.

(4) **GS-7**

(a) **Experience.** In addition to the basic requirements, 1 year of experience comparable to the next lower grade level. In addition, the candidate must demonstrate the following KSAs:

**PART II
APPENDIX G23****(b) Demonstrated Knowledge, Skills, and Abilities**

1. Ability to organize data, format that data into a presentation, and present information pertinent to patient care in formal or informal settings. Examples may include providing in-service training to staff or formal presentations to the treatment team.
2. Knowledge of contemporary physical therapy practice. This may be demonstrated through continuing education courses, in-service training, or journal article reviews.
3. Ability to independently implement selected components of interventions identified in the plan of care established by the physical therapist.

(c) **Assignment.** Employees at this grade level serve as staff PTAs. This is the full performance level for the PTA. Assignments include: service as an active team member in a comprehensive inpatient rehabilitation program such as geriatrics, amputee, traumatic brain injury, spinal cord injury, cardiac rehabilitation, aquatics, orthopedics, or wound care, etc.; prepare, provide, and supervise clinical training experiences for PTA students; and independently provide patient education to patients and their caregivers.

(5) GS-8

(a) **Experience.** Completion of 1 year of creditable experience equivalent to the next lower grade level, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Advanced knowledge of treatment techniques in order to assess changes in physical, mental, and/or medical status.
2. Advanced knowledge of physical therapy data collection and assessment techniques in order to perform specified aspects of patient evaluations and interventions.
- *3. Skill to manage and/or maintain responsibility for a specialty program.
- *4. Ability to lead a group of employees and communicate information regarding work assignments and scheduling.
- *5. Ability to instruct students and manage a trainee program for PTA students.

(c) **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. Employees at this grade level serve as senior PTAs. Candidates for assignment at this level must possess and demonstrate a level of clinical competence to serve as a consultant to other PTAs. Typical assignments for candidates at this grade level include, but are not limited to, one or more of the following:

1. Serve as a lead PTA for a group of PTAs.
2. Coordinates PTA programming responsibility for a specialty program.
3. Serves as the medical center coordinator for clinical education for PTA students, to include developing training plans, scheduling rotation assignments, providing feedback on students' performance, and participating in clinical training education for PTA students.

4. DEVIATIONS

- a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for PTAs in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrants such action based on demonstrated competence to meet the requirements of the proposed grade.
- b. Under no circumstances will the educational requirements be waived.
- c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

APPENDIX G24. MEDICAL TECHNOLOGIST QUALIFICATION STANDARD
GS-644
Veterans Health Administration

1. COVERAGE. The following are the requirements for appointment as a Medical Technologist (MT) in the Veterans Health Administration (VHA). These requirements apply to all VHA MTs in the General Schedule (GS)-644 series. In the health care community, MTs are generally referred to as “clinical laboratory scientists (CLS),” and this term is considered to be synonymous where stated in this qualification standard.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizenship of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified citizens in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Education and/or Experience Combination.** An associate’s degree in laboratory science or medical laboratory technology from an accredited institution or an equivalent program composed of at least 60 semester hours, from an accredited institution that, at a minimum, includes either: (a) 24 semester hours of medical laboratory technology courses; or (b) 24 semester hours of science courses that includes 6 semester hours of chemistry; 6 semester hours of biology; and 12 semester hours of chemistry, biology, or medical laboratory technology in any combination; and have laboratory training that includes completion of a NAACLS approved clinical laboratory training program with at least 3 months documented laboratory training in each specialty that the individual performs high complexity testing. In addition to the associate’s degree, must possess at least 3 years of directly related, full time work experience.

c. **Certification.** All candidates must currently possess or be eligible for and pass within one year the appropriate certification examination as a medical technologist or clinical laboratory scientist given by the American Society of Clinical Pathology Board of Registry (ASCP-BOR), the National Credentialing Agency (NCA), American Association of Clinical Chemists (AACC) or American Medical Technologists (AMT), or the American Association of Bioanalysts (AAB).

(1) Non-certified applicants who otherwise meet the eligibility requirements for certification may be given a temporary appointment as a graduate medical technologist under the authority of 38 U.S.C. § 7405 (a) (1) (D). Failure to obtain certification during that period is justification for termination of the temporary appointment. This may result in termination of employment.

(2) **Loss of Credential.** An employee in this occupation who fails to obtain licensure/certification/registration within the required time frame, or who fails to maintain the required licensure/certification/registration must be removed from the occupation, which may also result in termination of employment.

For occupations which require an active credential (licensure/certification/registration) at all grade levels, at the discretion of the appointing official, an employee may be reassigned to another occupation for which he/she qualifies if a placement opportunity exists. For occupations which require an active credential (licensure/certification/registration) in assignments above the full-performance level only, at

**PART II
APPENDIX G24**

the discretion of the appointing official, an employee may remain at an appropriate lower grade level in the occupation when both of the following apply: the credential is not a requirement and a placement opportunity exists.”

d. Grandfathering Provision. The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation. If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

e. Physical Requirements. See VA Directive and Handbook 5019.

f. English Language Proficiency. Medical technologists must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS

a. Definitions

(1) **Creditable Experience**

(a) **Knowledge of Current Professional Laboratory Practice.** To be creditable, the experience must have required the use of knowledge, skills, abilities, and other characteristics (also referred to as “core competencies”) associated with active professional laboratory practice. (Active professional practice is paid/non-paid employment as a professional MT/CLS as defined by NAACLS.) This may have been evidenced by one or more of the following:

1. The equivalent of 1 year of active professional practice in medical technology/clinical laboratory science performing moderate and/or high complexity testing as a certified or certificate-eligible MT/CLS; or
2. The equivalent of 1 year of professional practice in one of the disciplines or specialized areas of medical technology/clinical laboratory science performing moderate and/or high complexity testing as a certified or certificate-eligible MT/CLS; or
3. The equivalent of 1 year of active professional practice in a field directly related and applicable to the position to be filled; or
4. Academic coursework leading to an advanced degree in medical technology or a directly related health care field.

(b) **Quality of Experience.** Experience is only creditable if it was earned after completion of the basic requirements in paragraph 2.b. above. Qualifying experience must also be at a level comparable to laboratory experience at the next lower level.

(c) **Part-time Experience.** Part-time experience as a medical technologist is creditable according to its relationship to full-time workweek. For example, a MT would receive 1 week of full-time credit for each 2 weeks of half-time work.

(2) **Graduate Education.** Graduate education and graduate degrees may be substituted for experience through the GS-11 grade level, but only if from an accredited college or university in a field related to medical technology/clinical laboratory science, e.g., biochemistry, chemistry, microbiology, immunology, hematology, immunohematology, biological science, physiology, allied health education, health systems administration, infection control, and preventive medicine. Graduate education or a graduate degree in a field related to MT/CLS must be from a college or university, which was accredited at the time the candidate completed the program.

b. **Grade Determinations.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates.

- (1) **GS-5.** None beyond basic requirements.

(a) **Assignment.** Employees at this grade level serve in an MT career development position under close supervision.

**PART II
APPENDIX G24****(2) GS-7**

(a) **Experience.** In addition to the basic requirements, at least 1 year of experience comparable to the next lower grade level. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Education.** A bachelor's degree in medical technology/clinical laboratory science or a related science and completion of a medical technology clinical practice program. Both the education and the clinical practice program must have been approved by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The professional curriculum may have consisted of a post-baccalaureate certificate program or be integrated into a 4-year program of study that culminated in a baccalaureate degree.

(c) **Foreign Graduates.** Graduates of foreign baccalaureate degree programs meet the educational requirements if their degree is found to be equivalent to degree programs recognized by the NAACLS. This finding may be based on any of the following:

1. A letter from a college or university with a baccalaureate program recognized by the NAACLS stating that the individual's foreign degree has been evaluated and been found to be equivalent to its bachelor of medical technology degree.

2. A letter from the American Society for Clinical Pathology Board of Registry (ASCP-BOR), the National Credentialing Agency (NCA), or the American Medical Technologists (AMT) stating that the individual is eligible for the certification examination, or documentation from any other recognized organization that evaluates education.

(d) Demonstrated Knowledge, Skills, and Abilities

1. Demonstrated knowledge of professional medical technology principles, practices, concepts, and theories.

2. Demonstrated knowledge of laboratory quality control and assurance procedures and principles of performance improvement.

3. Knowledge of laboratory equipment and ability to maintain, troubleshoot, and repair.

4. Ability to plan, organize, set priorities, work as a team member, and effectively complete assignments.

5. Skill in informatics and processes, and the ability to communicate effectively electronically, orally, and in writing.

(e) **Assignments.** Duties and responsibilities may include any combination of those found at the GS-9 grade level; however, individuals in these assignments work under closer supervision and are not given the freedom of action typically found at the higher level.

(3) **GS-9**

(a) **Minimum Requirements.** Appointment or promotion to the GS-9 level requires a bachelor's degree in medical technology/clinical laboratory science or in a related science and completion of a medical technology clinical practice program. Both the education and the clinical practice program must have been approved by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS). The professional curriculum may have consisted of a post-baccalaureate certificate program or be integrated into a four-year program of study that culminated in a baccalaureate degree. In addition, candidates for GS-9 must possess either (b) or (c) below:

(b) **Experience.** Completion of 1 year of experience at the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the position to be filled.

OR,

(c) **Education.** Must have 2 years of progressively higher-level graduate education leading to a master's degree in medical technology or directly related field, or equivalent graduate degree provided the applicant's total background demonstrates the core competencies for GS-9 level assignment.

(d) **Demonstrated Knowledge, Skills, and Abilities.** In addition, the candidate must demonstrate the following KSAs:

1. Comprehensive knowledge of professional medical technology/clinical laboratory science principles, practices, concepts, and theories providing for sound independent work.
2. Comprehensive knowledge of laboratory quality control and assurance procedures and principles of performance improvement providing for sound independent work.
3. Knowledge of laboratory equipment and ability to maintain, troubleshoot, and repair instrumentation.
4. Ability to use independent technical judgment to analyze and interpret laboratory results.
5. Ability to interpret and apply complex written instructions.
6. Ability to communicate, consult, and interact with other members of the healthcare team, external relations, customer service, and patient education.

(e) **Assignment.** This is considered the full performance level for nonsupervisory positions. An MT/CLS at this level develops, performs, evaluates, interprets, correlates, and validates the accuracy of laboratory procedures and results. Testing procedures are performed on a variety of biological specimens and/or environmental samples using manual or automated techniques, and require a broad exercise of independent judgment and responsibility with minimal technical supervision. The work performed is in a variety of laboratory disciplines, such as bacteriology, chemistry (including endocrinology and toxicology), molecular biology, coagulation, flow cytometry, genetics, hematology, immunology, immunohematology (blood banking), mycology, parasitology, serology, urinalysis, and virology. Such positions include

**PART II
APPENDIX G24**

requirements to monitor quality control systems and measures; collaborate in the diagnosis and treatment of patients; and provide education for laboratory and other healthcare professionals, and others in the medical center setting including the public.

(4) GS-10

(a) **Experience.** Completion of 1 year of experience at the next lower grade level which demonstrates the knowledge, skills, abilities and other characteristics that are directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs as indicated by an asterisk (*):

(b) Demonstrated Knowledge Skills and Abilities

1. Comprehensive knowledge of and skill in applying a wide range of concepts principles and methodology of the field to perform advanced techniques.

2. Ability and knowledge to modify or adapt established methods, procedures, or techniques to resolve difficult or complex problems.

3. The ability to perform sound, independent work.

*4. Ability to perform lead and/or supervisory duties for such assignments.

*5. For supervisory or lead position, ability to provide or coordinate staff development and training.

(c) **Assignments.** An MT/CLS at the GS-10 level carries out all of the testing responsibilities of the GS-9, but has higher levels of professional responsibilities and expertise. Technologists at this level generally have professional oversight responsibilities and may have responsibility for a specific large scale automated analytical instrument system; a specific area of laboratory functions, such as employee competency records, supply functions, quality control review, new method development, or employee or student training; or provide professional and technical advice to other technicians and technologists on evening or night shifts. 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.

1. Team Leader. Serves as an expert providing authoritative advice and consultation for more difficult, complex, or unique tests requiring special knowledge. Assists the supervisor in technical phases of the organizational level on various aspects of the specialized testing including appropriateness that takes into consideration clinical context. Facilitates team or unit processes by working in collaboration with team members to ensure that tasks, priorities, goals are coordinated with management.

2. Sole MT/CLS. Individuals in this assignment serve as the sole MT/CLS at a medical center or an outpatient clinic. Individuals serving as sole MT/CLS may be graded at the GS-11 level or higher if the complexity of their assignment is comparable to those assignments.

3. Senior Staff Specialist. In addition to performing the full range of the GS-9 assignment, the MT/CLS must demonstrate the knowledge, skills, and abilities required to perform more complex laboratory functions. Duties and responsibilities may include any combination of those found at the GS-11 level; however, individuals in these assignments are not given the freedom of action typically found at the higher level. For example, their duties may include any of the following.

a. Attends vendor training for a complex analytical instrument and is responsible for training employees in its operation. Performs complex maintenance procedures and is consulted as the in-house expert for troubleshooting problems.

b. Is responsible for updating procedure manuals for a specific laboratory function.

c. Supervises the clinical training experiences of technical and professional level technologist or technician training programs to fulfill educational and professional requirements (where training programs exist).

d. Recommends updated guidelines and policies for non-routine or complex assignments.

e. Coordinates the laboratory competency program.

4. Supervisory Technologist. Serves as a first-line supervisory medical technologist. Plans work schedules to assure an even flow and distribution of work; explains work requirements and assigns work; sets deadlines and priorities; recommends methods to improve work quality and productivity; reviews the work of staff supervised; directs training for employees; advises employees of the performance requirements of their positions; keeps them informed of their progress in meeting these requirements; and prepares formal evaluations of employee performance.

(4) **GS-11**

(a) **Experience.** MTs must have the equivalent of 1 year of creditable, progressively responsible experience comparable to the next lower grade level, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs as indicated by an asterisk (*):

OR,

(b) **Education.** Must have 3 full years of progressively higher-level graduate education or a Ph.D. or equivalent doctoral degree in medical technology or a directly related field, provided the applicant's total background demonstrates evidence of knowledge, skills, and abilities necessary to perform the work of the position to be filled.

(c) **Assignments.** These assignments require specialized training and experience. Employees must have advanced knowledge of specialized and complex subject matter extending beyond the duties of test performance. They have wide latitude for exercising independent judgment. For all assignments above the full performance level, the higher-level duties must consist of significant scope, complexity (difficulty), and

**PART II
APPENDIX G24**

range of variety, and be performed by the incumbent at least 25% of the time. Individuals at the GS-11 grade level in these laboratories spend a majority of their time in the following assignments:

1. Technical Specialist. The incumbent serves as an expert providing authoritative advice and consultation for more difficult, complex, or unique tests requiring special knowledge, e.g., flow cytometry and molecular pathology. Advises all organizational levels on various aspects of the specialized testing including appropriateness that takes into consideration clinical context. The technical specialist often works independently and is given freedom of action under the general guidance of a pathologist or other laboratory practitioner. In addition to the required core competencies, the technical specialist must demonstrate the following:

a. Demonstrated Knowledge, Skills, and Abilities

(1) Advanced knowledge and understanding of regulatory and accrediting agency requirements, medicolegal requirements, and pertinent statistics sufficient to perform complex diagnostic tests.

(2) Knowledge and skill sufficient to apply standard medical technology techniques to conduct a variety of difficult and complex test systems.

*(3) Ability to apply new scientific/technical developments and theories to laboratory testing.

(4) Knowledge of instructional techniques to instruct newly hired technologists and clinical pathology residents in proper performance of tests and applications of the laboratory procedures.

(5) Knowledge to develop procedures for new tests, and modify existing procedures and methods in order to resolve problems relative to complex and difficult situations.

2. Laboratory Information Systems Manager. The incumbent develops and recommends new policies and procedures regarding the installation and use of the laboratory information system (LIS) in conjunction with the overall the hospital information system (HIS). Provides authoritative advice and consultation on the information system as they apply to the clinical laboratory. Advises all organizational levels on functions and capabilities of the LIS. Implements and maintains coding and mapping for laboratory test ordering, reporting, billing, and workload recording taking into account compliance principles. Analyzes emerging trends, software, and technology and adopts appropriate methods for local programs to meet agency goals. In addition to the required core competencies, must demonstrate the following:

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of concepts, principles and methodology of clinical laboratory technology sufficient to revise standard methods to improve or extend test systems; and evaluate, modify, or adapt new methods to meet the requirements of particular testing situations.

(2) Knowledge and understanding of laboratory operations and their relationship to the organization sufficient to provide advisory, inspection, training, and problem-solving services on specific projects, programs, or functions.

(3) Knowledge of laboratory information systems and programming techniques sufficient to develop, adapt, and maintain computer systems for accomplishing diagnostic laboratory work and quality assurance.

*(4) Ability to adapt, implement, and integrate the use of software to specific laboratory applications and processes.

(5) Knowledge of compliance requirements for laboratory functions.

*(6) Knowledge of computer system analysis, computer language, and program design sufficient to implement various laboratory associated packages and sustain operation of the laboratory system.

3. Laboratory Education Coordinator. The incumbent provides authoritative representation and interaction with cooperating or affiliated universities or colleges, resource organizations, and state and federal officials in order to coordinate program goals, objectives, and policies. Candidates in this assignment spend a significant amount of time administering clinical training programs for medical technology students, facility staff, and others assigned for medical technology training. They design, teach, and evaluate the training programs. These assignments occur at active, affiliated VHA facilities. Individuals establish, negotiate, and maintain affiliation agreements and schedule students for appropriate rotation. They also may serve on curriculum or admission committees of the affiliated colleges after formal appointment as a faculty member. They may arrange formal in-service programs for the laboratory. In addition to the required core competencies, must demonstrate the following:

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of medical technology concepts, principles, and practices sufficient to plan and direct an educational program for student medical technologists and continuing education programs for the staff of a large clinical laboratory.

(2) Skill in using educational design, development, and evaluation techniques.

*(3) Knowledge of the standards of the education program's accrediting organization.

*(4) Knowledge of affiliated organizations and their agreements.

(5) Knowledge and skill in teaching methods.

(6) Knowledge of instructor development and skill sufficient to conduct continuing education sessions in principles of learning and teaching techniques.

4. Quality Management Technologist. The incumbent provides authoritative consultative services to management at all levels of the organization as it applies to quality management in a clinical laboratory setting. Maintains a laboratory performance improvement program and ensures monitoring of components and customer feedback. Interacts with management officials and organizations involved in inter-laboratory quality assurance and proficiency testing. In addition to the required core competencies, must demonstrate the following:

ART II

APPENDIX G24

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of the concepts, principles, and practices of medical technology sufficient to perform the full range of duties involved in planning, coordinating, and evaluating laboratory services.

(2) Knowledge of performance management standards, including preventive maintenance and performance testing procedures.

*(3) Knowledge of accrediting agency and regulatory requirements pertaining to laboratory operations.

(4) Comprehensive knowledge of statistical evaluation and analysis.

(5) Knowledge and understanding of laboratory operations and relationships to the organization.

(6) Comprehensive knowledge of laboratory quality control/assurance policies, procedures and principles.

(7) Comprehensive knowledge of safety practices and regulations.

5. Lead Medical Technologist/Clinical Laboratory Scientist. The incumbent facilitates team or unit processes by working in collaboration with team members to ensure that tasks, priorities, goals needs, and achievements are coordinated with management. Acts as a liaison to other departments of the medical center for the appropriate laboratory specialty. In addition to the required core competencies, must demonstrate the following:

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of medical technology applicable to a wide range of duties in all areas of the laboratory, and a high level of skill in applying this knowledge in solving very complex problems involving diverse aspects of clinical laboratory practice.

(2) Knowledge of regulatory, licensing and accrediting agency requirements, and statutes governing clinical laboratory operations sufficient to use in planning, implementing, or monitoring laboratory programs and services.

*(3) Management, administrative, and professional knowledge sufficient to effectively oversee and coordinate daily work activities and assignments in a section.

(4) Knowledge of laboratory instrumentation, and the ability to maintain, troubleshoot, and repair instrumentation.

*(5) Ability to provide technical oversight and assign personnel and tasks to be accomplished in a manner that assures completion of the workload.

6. Supervisory Technologist. In smaller, less complex laboratories having no GS-11 positions, a supervisory technologist may be a GS-11. In a larger, more complex laboratory may serve as a supervisor

in a designated area of the laboratory with the primary responsibility for providing direction to non-testing personnel, such as medical technicians, aides, and health care technicians in specimen collection, specimen processing and accessioning, and quality control activities of the section. Employees in this assignment perform the full range of supervisory duties for one or more sections of the laboratory, including responsibility for assignment of work performed; performance evaluations; recommendations for appointment, awards, advancement, and, when appropriate, disciplinary actions; identification of continuing education and training needs. The individual assures compliance with accrediting agency and regulatory requirements; establishes and monitors the quality of the pre-analytical processes as part of the overall laboratory quality management program, and assures corrective action is initiated as needed. The supervisor assures orientation and competency of assigned staff. In addition to the required core competencies, must demonstrate the following:

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of federal and state laws and regulations, laboratory accrediting and regulatory requirements sufficient to develop section plans and procedures consistent with requirements.

(2) Knowledge of quality management principles sufficient to establish and monitor a laboratory quality management program, and/or education and training of laboratory staff.

(3) Skill in interpersonal relations and conflict resolution to deal with employees, team leaders, and managers.

*(4) Ability to perform the full range of supervisory duties and skill in supervising a group of individuals.

*(5) Ability to plan, organize, set priorities, work as a team member, and effectively complete assignments.

(6) Knowledge of specimen requirements for tests performed in-house and referred to reference laboratories.

*(7) Ability to set short and/or long term goals for the section and conduct studies on technical and administrative problems, including personnel shortages, organizational structure, new technology, etc.

7. Senior Technologist. The incumbent serves in one or more sections of a clinical laboratory and is assigned specialized and complex laboratory tasks beyond providing patient test results. Assignments may include laboratory test development or modification, method validation/performance evaluation, and/or providing consultation services to health care providers. In addition to the required core competencies, must demonstrate the following:

a. Demonstrated Knowledge, Skills, and Abilities

(1) Comprehensive knowledge of, and skill in applying, a wide range of concepts, principles, and methodology of the field to perform advanced techniques.

**PART II
APPENDIX G24**

(2) Ability to modify or adapt established methods, procedures, or techniques to resolve difficult or complex problems.

(3) Ability to recognize methodology limitations such as linearity, interference, sensitivity, and specificity to draw conclusions about the validity of testing results.

(4) Ability to perform validation/method verification studies for new systems and make recommendations.

(5) Skill to provide advisory services to technicians, technologists, and other specialists.

(5) GS-12

(a) **Experience.** Completion of the equivalent of 1 year of creditable experience at the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs as indicated by an asterisk (*):

(b) **Assignments.** 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. Candidates at this grade level are in one of the following assignments:

1. Supervisory Technologist. The incumbent at this level has full supervisory responsibility for a large staff of nonsupervisory personnel, including GS-9 and GS-11 MTs, and at least 1 subordinate team leader or supervisor at the next lower grade level. Recommends appointment, plans and assigns work, gives advice and counsel and evaluates work of subordinates. Is responsible for monitoring test analyses and specimen examinations to ensure acceptable levels of performance. Assures corrective action is initiated. Assures orientation, training and competency assessment of assigned staff. Develops and updates technical policy and procedure manuals. Ensures all staff and affiliate staff are in compliance with accrediting and regulating bodies. Adjusts staffing levels or work procedures to accommodate resource allocation decisions made at the executive level. In addition to the required core competencies, must demonstrate the following:

a. Demonstrated Knowledge, Skills, and Abilities

(1) Skill to develop new policies and guidelines, formulate plans, and the ability to judge effectiveness of the operation.

(2) Knowledge of laboratory quality management procedures and principles.

*(3) Knowledge of, and ability to, provide the full range of supervisory duties which would include responsibility for assignment of work to be performed; performance evaluations; selection of staff; and recommendation of awards, advancements, and, when appropriate, disciplinary actions.

(4) Ability to analyze organizational, technical, and administrative problems to develop and implement solutions that result in efficient overall laboratory operation.

(5) Ability to successfully apply principles and techniques of sound human resources and labor management.

*(6) Knowledge and ability to manage fiscal matters of the functions supervised, forecast resource and equipment needs, and administer the allocated budget.

2. Ancillary Testing Coordinator. The incumbent develops and recommends policies and procedures for the procurement and service requirements for ancillary testing (testing outside the physical confines of the main laboratory as mandated by VHA). Must have knowledge of accrediting agencies and regulatory requirements. In addition to the required core competencies, must demonstrate the following:

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of medical technology concepts, principles, practices, and methodologies sufficient to perform the full range of maintenance of both a technical and safety accreditation/testing program.

(2) Comprehensive knowledge to apply new scientific/technological developments and theories to laboratory testing and a grasp of complex laboratory testing issues.

(3) Knowledge of mathematics and statistics as related to quality control, quality assurance, proficiency testing, inspection and accreditation, and continuous quality improvement.

(4) Knowledge of the types of surveillance needed to monitor variables that affect quality of services and skill in evaluating, interpreting, and teaching others to use quality control procedures and implementing corrective actions.

(5) Knowledge of federal, VHA, and state laws and regulations, reference standards, medicolegal responsibilities, and certifying and accrediting agency requirements to carry out the work in each ancillary testing site.

3. Laboratory Manager/Chief Technologist/Administrator. The incumbent works in a smaller, less complex laboratory and is responsible for managing and supervising all phases of laboratory service operations. Provides guidance and serves as an authority on laboratory medicine. Develops guidelines, assesses laboratory effectiveness, establishes, and maintains quality assurance and performance improvement programs. Consults with local and network officials. In addition to the required core competencies, must demonstrate the following:

a. Demonstrated Knowledge, Skills, and Abilities

(1) Ability to understand the balance between administrative and clinical functions to coordinate and control programs and resources.

*(2) Knowledge and skill in management/administration, which includes program planning, coordination, interpretation, supervision, consultation, negotiation, problem solving, formulation of policy and guidelines, and monitoring of laboratory programs.

**PART II
APPENDIX G24**

(3) Ability to plan and execute long and short-range plans and goals.

(4) Ability to effectively communicate, both orally and in writing, on technical information with a wide variety of individuals including senior VHA managers in the medical center, Veterans Integrated Service Network (VISN) level staff, and VHA Central Office staff.

(5) Skill in applying analytical and evaluative methods and techniques to the measurement and improvement of program effectiveness and/or organizational productivity.

(6) Skill to develop new or modified work methods, organizational structures, records and files, management processes, staffing patterns, etc.

(7) Knowledge of regulatory, licensing, and accrediting agency requirements, and statutes governing clinical laboratory operations to use in planning, implementing, and monitoring laboratory programs and services.

(6) GS-13

(a) **Experience.** Completion of the equivalent of 1 year of creditable experience at the next lower grade level, which is directly related to the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs as indicated by an asterisk (*):

(b) **Assignments.** Advancement of the laboratory director/manager/chief technologist/administrator to the GS-13 level is generally restricted to those serving at larger medical facilities with comprehensive and complex laboratory services (typically active, affiliated medical centers or outpatient clinics) and having full supervisory responsibility for a large staff including GS-11 and GS-12 personnel. Individuals supervising more than one large service within a facility, or more than one medical center laboratory at different geographic locations, may also be assigned at the GS-13 level. 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. Candidates at this grade level are in one of the following assignments.

1. Regional Commissioner Technologist. The incumbent serves as an authority to multiple laboratories in a region to assure compliance with inspection and accreditation requirements and regulations. Provides direction and guidance to resolve technical problems and provides interpretation of existing regulations. Requires verbal, written, and electronic communication with accrediting and regulatory bodies. Works under the direction and guidance of the VHA Enforcement Officer in VHA Central Office. These positions were established in accordance with Public Law 102-139, Sec. 101(a). In addition to the required core competencies, must demonstrate the following:

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of concepts, principles, and methodology of medical technology sufficient to assess and monitor quality control, quality assurance, and proficiency testing in all areas of the laboratory.

(2) Knowledge of accrediting and regulatory agency requirements regarding consolidated oversight of clinical laboratories.

(3) Knowledge and understanding of laboratory operations and relationships to the organization.

*(4) Ability to organize and present lectures on the inspection and accreditation rules, regulations, and standards of all laboratory accrediting agencies.

(5) Ability to delineate and interpret accreditation standards.

2. Laboratory Director/Manager/Chief Technologist/Administrator. The incumbent shares, with the chief of laboratory service/medical director, full responsibility for managing and supervising all phases of laboratory service operations. Provides guidance and serves as an authority on laboratory medicine. Develops guidelines, assesses laboratory effectiveness, establishes, and maintains quality assurance and performance improvement programs. Serves as a consultant to local, network, and national program officials. In addition to the required core competencies, must demonstrate the following:

a. Demonstrated Knowledge, Skills, and Abilities

(1) Advanced knowledge of concepts, principles, and methodology of a major clinical laboratory program and operations to assess program effectiveness and provide authoritative guidance for operations, personnel, and management.

*(2) Ability to work collaboratively with other disciplines, upper management, VHA Central Office and/or VISN level staff.

(3) Ability to plan and execute short and long range programs.

*(4) Skill in administrative management, i.e., budgeting, contracting, procurement, and property management.

(5) Ability to provide advisory, planning, and surveillance services to clinicians, laboratory directors, and supervisors on specific functions, programs, or problems that are particularly difficult, widespread, or persistent.

(6) Ability to solve complex problems concerned with unique or controversial aspects of medical technology or laboratory management, new or unconventional methods, program changes, or conflicts between scientific/technological requirements and regulatory or program (i.e., cost effectiveness) requirements.

4. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for medical technologists in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements of the proposed grade.

PART II

APPENDIX G24

b. Under no circumstances will the certification or educational requirements as a medical technologist be waived.

c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

**APPENDIX G25. DIAGNOSTIC RADIOLOGIC TECHNOLOGIST
QUALIFICATION STANDARD
GS-647
Veterans Health Administration**

1. COVERAGE. The following are the requirements for appointment as a Diagnostic Radiologic Technologist (DRT) in the Veterans Health Administration (VHA). Diagnostic imaging embraces imagery produced using ionizing radiation as well as other nonionizing radiation techniques, including ultrasound, computed tomography, and magnetic resonance imaging scans. These requirements apply to all VHA DRTs in the General Schedule (GS)-647 series.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified candidates in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Certification.** All applicants must be certified in general radiologic technology by the American Registry of Radiologic Technology (ARRT) (R).

c. **Experience or Education.** Completion of a full-time training course of at least 24 months duration (or the equivalent) in a post-high school diagnostic radiologic technology program, evidenced by a certificate or an associate's degree, accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT), and certification by the American Registry of Radiologic Technologists (ARRT) in radiology.

(1) Public Law 97-35, the Consumer-Patient Radiation Health and Safety Act of 1981, requires that persons who administer radiologic procedures meet the credentialing standards in 42 CFR Part 75, Standards for the Accreditation of Educational Programs and the Credentialing of Radiographic Personnel. Essentially, they must have successfully completed an educational program that meets or exceeds the standards described in that regulation, and is accredited by an organization recognized by the Department of Education, and be certified as radiographers in their field.

(2) Non-certified applicants who otherwise meet the eligibility requirements for ARRT (R) certification may be given a temporary appointment as a graduate DRT under the authority of 38 U.S.C. § 7405 (a) (1) (D). Failure to obtain certification during that period is justification for termination of the temporary appointment. This may result in termination of employment.

(3) **Loss of Credential.** An employee in this occupation who fails to obtain licensure/certification/registration within the required time frame, or who fails to maintain the required licensure/certification/registration must be removed from the occupation, which may also result in termination of employment.

For occupations which require an active credential (licensure/certification/registration) at all grade levels, at the discretion of the appointing official, an employee may be reassigned to another occupation for which he/she qualifies if a placement opportunity exists. For occupations which require an active credential (licensure/certification/registration) in assignments above the full-performance level only, at the discretion of the appointing official, an employee may remain at an appropriate lower grade level in the occupation when both of the following apply: the credential is not a requirement and a placement opportunity exists.

PART II
APPENDIX G25

d. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

NOTE: Each uncertified VA Diagnostic Radiologic Technologist who was permanently employed on June 21, 1986, and whose competence in the safe administration of ionizing radiation was affirmed, in writing, by a VA licensed physician not later than January 1, 1987, is considered fully qualified. These employees may be promoted, demoted or reassigned within the GS-647 occupational series. Any employee initially retained in this manner who leaves this job series loses protected status and must meet the full requirements in effect at the time of reentry.

e. **Physical Requirements.** See VA Directive and Handbook 5019.

f. **English Language Proficiency.** Diagnostic Radiologic Technologists must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS

a. Definitions

(1) Creditable Experience

(a) **Knowledge of Current Radiologic Technology Practice.** To be creditable, experience must have demonstrated possession of the knowledge, skills, abilities, and other characteristics (also referred to as “core competencies”) associated with current radiologic technology practice. This may have been evidenced by the equivalent of 1 year of active practice, which is paid or non-paid employment as a DRT as defined by ARRT.

(b) **Quality of Experience.** Experience is only creditable if it was earned after completion of the basic requirements identified in paragraph 2.b. above. Experience as a graduate DRT is creditable provided the candidate functioned as a DRT and subsequently passed the certification examination.

(c) **Part-Time Experience.** Part-time experience as a DRT is creditable according to its relationship to full-time workweek. For example, a DRT would receive 1 week of full-time credit for each 2 weeks of half-time work.

(2) **Specialized Assignment Definitions.** Specialized areas of radiologic technology include general diagnostic radiologic technology (R), bone densitometry (BD), mammography (M), diagnostic ultrasound (S), computed tomography (CT), positron emission tomography/computed tomography (PET/CT), magnetic resonance imaging (MR), cardiovascular-interventional technology (CV), and quality management (QM).

(a) **General Radiologic Technology (R).** Diagnostic radiologic technologists perform procedures and examinations in hospitals or clinics under the direction of radiologists and other medical officers. The objective of the examinations and procedures is to produce radiographic studies that are used in medical diagnosis and interpreted by medical officers to locate injuries, foreign bodies, pathological conditions, or lesions within the body. They prepare and administer contrast media and medications in accordance with State and Federal regulations. All diagnostic radiologic technologists must be knowledgeable in Computerized Radiography (CR) and Picture Archiving and Communications Systems (PACS).

(b) **Bone Densitometry (BD).** This non-invasive test measures bone mineral content to diagnose a systemic skeletal disease (osteoporosis) characterized by low bone mass and microarchitectural distortion of bone tissue, with a consequent increase in bone fragility and susceptibility to fracture.

(c) **Mammography (M).** The complex nature of breast disease involves multiple imaging modalities. This specialty involves the specific knowledge and abilities to perform complex imaging of the breast. They must be able to employ specialized mammographic image techniques such as magnification views and implant views of the breast. The mammographer is required to be completely familiar with, and adhere to, all U.S Food and Drug Administration (FDA) guidelines regulating the practice of mammography, radiation safety, and quality assurance requirements. Mammographers are subject to the Mammography Quality Standards Act of 1992 (MQSA) and regulated by the FDA.

**PART II
APPENDIX G25**

(d) **Diagnostic Ultrasound (Sonography) (S).** Positions should be assigned to the DRT, GS-647 series, when both ultrasound and other modalities which require the delivery of ionizing radiation are performed. Positions in which ultrasound duties are performed exclusively (no other modalities are performed), should be assigned to the Medical Instrument Technician, GS-649 series, since ultrasound duties solely do not require the delivery of ionizing radiation. Diagnostic ultrasound uses high frequency sound waves and other diagnostic techniques for medical purposes. The practitioner must be competent in the production, use, recognition, and analysis of ultrasound images and patterns used for patient diagnosis and treatment. The sonographer is regarded as the expert source of all ultrasound imaging, and the interpreting radiologist relies heavily on the skills, knowledge, and abilities of the sonographers in providing a final interpretation. Within this specialization there is a diverse range of ultrasound imaging sub-specialties. These include: 1) diagnostic medical sonography – abdominal, neurologic, obstetrical/gynecologic, and ophthalmic; 2) cardiac sonography – adult and pediatric echocardiography; and 3) vascular technology – vascular and related organs.

(e) **Computed Tomography (CT).** This specialty modality requires specific knowledge of cross sectional human anatomy and its application in spiral, and/or, multi-slice computer tomography, inclusive of 3-D reconstruction scans, including drainages, biopsies, and peripheral vascular examinations. The technologist requires specific knowledge and training in the location, appearance, and function of the various major and minor systems susceptible to radiological illumination; to interpret the examination request accurately; to understand the functioning and inter-relationship of the various organs; to use the methods and techniques which will identify organs appearing on the digital display monitor, or on film, and the various stages of the examination to judge the acceptability of the image and/or scan for diagnostic use and to emphasize the aspects of particular interest to the physician.

(f) **Positron Emission Tomography/Computed Tomography (PET/CT).** PET/CT is part of the progression of fusion imaging, combining one specialty modality with another. This technology combines metabolic function with anatomic form. Registered technologists in diagnostic radiologic technology, nuclear medicine and/or radiation therapy may operate PET/CT when the appropriate core competencies are evidenced. Technologists performing these procedures must be competent in every aspect of the examination in order to maximize quality and minimize dose. Technologists must be knowledgeable in contrast media, power injectors, and CR systems and PACS.

(g) **Magnetic Resonance Imaging (MR).** This specialty modality requires additional knowledge of super conducting magnets, the physics of superconducting magnets, and how they relate to the human anatomy in medical imaging. The technologist must be educated in the safety factors governing a magnetic environment that patients, visitors, and equipment enter into. The practitioner must have specific specialized knowledge of cross sectional anatomy and how it relates to the soft tissues and vessels of the human body. The technologist must also have specialized knowledge in the radio-frequency surface coils required for each specific anatomical area to be imaged. The technologist requires knowledge of image acquisition in Computerized Radiography (CR) and Picture Archiving and Communication Systems (PACS).

(h) **Cardiovascular-Interventional Technology (CV).** Cardiovascular-interventional technologists (CV) use specialized equipment to perform diagnostic angiographic procedures and complex vascular and nonvascular interventional and therapeutic procedures. This specialty requires additional knowledge of vascular systems and major vessel anatomy. The technologist must be

knowledgeable in the specialized equipment employed for digital subtraction systems and interventional procedures. The technologist administers contrast media under the supervision of the staff radiologist and confers with the radiologist to establish requirements with reference to contrast agents, vital signs, medications, and physiologic monitoring to perform procedures. CV technologists must be knowledgeable in Computerized Radiography (CR) and Picture Archiving and Communications Systems (PACS).

(i) **Quality Management Technologist (QM).** Performs daily inspection of radiographic units to ensure proper mechanical functionality. Performs daily sensitometric and densitometer testing on all x-ray film processors. Performs monthly, quarterly, semi-annual, and annual Quality Control testing; i.e., dark room fog, sensitometer consistency, and densitometer calibrations. Ensures daily functionality of CR readers. Provides in-service training to technologists and other personnel involved in the operation and maintenance of x-ray film processors, CR readers, and other PACS type of operations maintained within the department. Coordinates all scheduling of preventative maintenance for modalities either through biomedical engineering or local contractor service. Works with physicists to ensure compliance with radiation safety program and for acceptance testing of all new installations of equipment. Maintains accurate records, as required by management, for quality assurance analysis, quality control, performance improvement, and other related purposes.

b. **Grade Determinations.** In addition to the basic requirements for appointment, the following criteria must be used when determining the appropriate grade assignment of candidates:

(1) **GS-5**

(a) **Experience or Education.** None beyond the basic requirements.

(b) **Assignment.** Employees at this level serve in a DRT career development position. It is expected that they receive guidance from more experienced staff members for more complex patient issues, and require daily and direct supervision.

(2) **GS-6**

(a) **Experience.** At least 1 year of experience at the next lower grade level that demonstrates the core competencies described at that level, i.e., experience that demonstrates possession of the knowledge, skills, abilities, and other characteristics needed to provide general radiologic technology services in a therapeutic setting. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Education.** The successful completion of a 4-year baccalaureate degree program in radiography or other directly related field to diagnostic radiology/imaging.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of basic technique standards for minimum radiographic exposure;

**PART II
APPENDIX G25**

2. Knowledge of anatomy and positioning;
3. Knowledge of all patient safety procedures;
4. Knowledge of radiographic producing equipment; and
5. Ability to learn basic computer functions.

(d) **Assignment.** Candidates at this grade level serve as staff DRTs. It is expected that they receive guidance from more experienced staff members for more complex patient issues and require direct supervision in any assignment area of general radiologic technology.

(3) GS-7

(a) **Experience.** At least 1 year of experience at the next lower grade level that demonstrates the core competencies described at that level, i.e., experience that demonstrates possession of the knowledge, skills, abilities, and other characteristics needed to provide general radiologic technology services in a therapeutic setting and/or in a specialized area. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Education.** The successful completion of 1 full academic year of graduate education leading to a degree program in radiography or other directly related field related to diagnostic radiology/imaging. Education may relate to the duties of a specific position or to the occupation, but must be appropriate for the position being filled.

(c) **Certification.** Certification by ARRT in one of the specialized areas of radiologic technology is highly desirable, in addition to certification by ARRT as a general radiologic technologist.

(d) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of the technical adequacy of the digital image, including the ability to adjust the image quality in the digital system;
2. Knowledge of different contrast material required for the requested study;
3. Knowledge of radiation protection standards, minimum radiographic exposure techniques, appropriate beam limitation to anatomical area, and employing lead shielding when performing standard or fluoroscopic procedures;
4. Knowledge of the function of computed radiography, Phosphor cassettes and computed radiography (CR) readers;
5. Knowledge of PACS systems, CDROMS, and basic computer skills;
6. If the position is supervisory in nature, ability to manage and supervise employees; and

7. If the position is supervisory in nature, ability to coordinate staff development and training.

(e) **Assignments.** Staff DRT assignments at this level represent the advanced developmental level leading to the full performance level, performing a substantially full range of duties but receiving guidance and directions regarding unfamiliar or unusual situations for more complex patient issues. Employees may also be assigned to team leader and supervisory positions at this level.

1. **Staff DRT.** Candidates at this grade level are to be qualified to provide services in specialized areas of radiologic technology listed above and/or general radiologic technology services.

2. **Diagnostic Radiologic Technology Team Leader.** Functions as a lead technologist for a group of DRTs at the GS-6 level or lower, who provide the full range of general radiographic imaging procedures. Typical assignments include, but are not limited to: providing technical oversight necessary for accomplishing the work of the organizational unit; planning, directing, and distributing the work to technologists at lower grade levels; providing feedback to supervisor on technical aspects of work; resolving informal employee complaints; instructing and training technologists on newly acquired equipment; and independently performing a variety of general and/or specialized radiographic imaging procedures in more complex cases.

3. **Supervisory Diagnostic Radiologic Technologist.** Functions as a first-level supervisor for a group of DRTs at the GS-6 level or lower, who provide the full range of general radiographic imaging procedures. Plans work schedules to assure an even flow and distribution of work; explains work requirements and assigns work on a daily and weekly basis, accounting for weekend and evening shifts (if necessary); sets deadlines and priorities; develops operating instructions; identifies equipment requirements; recommends methods to improve work quality and productivity; reviews the work in progress or upon completion by spot checking, as appropriate. Directs on-the-job training for employees and provides back-up skills by cross training. Confers with radiologists to develop standard and non-standard exam protocols. Advises employees of the performance requirements of their positions, keeps them informed of their progress in meeting the requirements, and prepares formal evaluations of employee performance.

(4) **GS-8**

(a) **Experience.** At least 1 year of experience at the next lower grade level that demonstrates the core competencies described at that level, i.e., experience that demonstrates possession of the knowledge, skills, abilities, and other characteristics needed to provide general radiologic technology services in a therapeutic setting and/or in a specialized area. In addition, the candidate must demonstrate the following KSAs:

(b) **Certification.** Certification by ARRT in one of the specialized areas of radiologic technology is highly desirable, in addition to certification by ARRT as a general radiologic technologist.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to check system for operation and assess acceptable performance based on established guidelines;

2. Knowledge of calibration parameters and the ability to make adjustments as needed;

PART II
APPENDIX G25

3. Knowledge of patient's clinical record, diagnosis, and laboratory results;
4. Ability to monitor patient's physiologic changes during the procedure and keep the radiologist informed;
5. Skill in using tact, diplomacy, and courtesy in dealings with the customer base, patients, staff, family, visitors, and volunteers; and
6. Knowledge of anatomy and physiology, and cross-sectional anatomy, recognizing unusual images, and determining proper positioning to best demonstrate areas of interest.
7. If the position is supervisory in nature, the ability to manage and supervise employees; and
8. If the position is supervisory in nature, the ability to coordinate staff development and training.

(d) **Assignments.** Employees at this grade level serve as staff DRTs at the full performance level, and may be appointed to one of the following assignments:

1. **Staff DRT.** Candidates at this grade level are to be qualified to provide services in specialized areas of radiologic technology listed above and/or general radiologic technology services.
2. **Diagnostic Radiologic Technology Team Leader.** Functions as a lead technologist for a group of DRTs at the GS-7 level or lower, who provides the full range of general radiographic imaging procedures. Provides feedback to supervisor on technical aspects of work. Evaluates new products and equipment and makes recommendations to supervisor concerning developments that would improve operations. Ensures all equipment is in safe working order, reporting all equipment problems as appropriate. Maintains supplies for work areas.
3. **Supervisory Diagnostic Radiologic Technologist.** Functions as a first-level supervisor for a group of DRTs at the GS-7 level or lower, who provides the full range of general radiographic imaging procedures. Oversees attendance and leave, including approval of ordinary sick and annual leave and vacation schedules. Informs higher level management of anticipated vacancies or increases in workload; recommends promotions, reassignments, or other changes of assigned personnel, such as retention or release of probationary employees, annual salary step increases, and recommending recognition of superior performance. Holds corrective interviews with employees, referring disciplinary problems to higher levels of management; resolves informal complaints of employees; deals with union representatives on matters involving action by an immediate supervisor. Provides technical supervision necessary for accomplishing the work of the organizational unit.

(5) **GS-9**

(a) **Experience.** Completion of 1 year of experience equivalent to the next lower grade level directly related to the position being filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*)

(b) **Assignments.** 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. DRTs at this grade level may be appointed to one of the following assignments:

1. Staff DRT. Employees at this level are fully functional as a DRT and are able to carry out their assigned tasks independently. DRTs at this level may have varying assignments including special and complex radiographic procedures. Regardless of the nature of the specific assignment, the work must be of sufficient scope and complexity to meet the knowledge, skills, and abilities to perform at this level.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Ability to balance the needs of the patients and staff while still performing complex scans and procedures;

(2) Skill to demonstrate appropriate techniques to gather relevant information from the medical record, significant others, and health care providers;

*(3) Ability to assess factors that may contraindicate the procedure;

(4) Knowledge of basic first aid and basic life support practices related to radiography;

(5) Knowledge of physical assessment, aseptic techniques, intravenous skills, and universal precautions; and

(6) Knowledgeable in pre-procedural, procedural, and post-procedural care of patients.

2. Diagnostic Radiologic Team Leader. Functions as a lead DRT for a group of DRTs.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Ability to provide technical oversight and assign personnel and tasks to be accomplished in a manner that assures completion of the workload utilizing the personnel to the greatest advantage thus providing the optimal level of patient care within the workday;

*(2) Ability to plan, direct, and distribute work assignments to diagnostic radiologic technologists at lower grade levels;

*(3) Skill in instructing and training DRTs on newly acquired equipment; and

*(4) Ability to plan and project staffing needs.

3. Supervisory Diagnostic Radiologic Technologist. Functions as a supervisor for a group of DRTs and may include support staff. Advises employees of the performance requirements of their positions, informs them of their progress in meeting the requirements, and prepares formal evaluations of employee performance. Conducts corrective interviews with employees, referring disciplinary problems to higher levels of management; resolves informal complaints of employees; and deals with union representatives as appropriate.

**PART II
APPENDIX G25****a. Demonstrated Knowledge, Skills, and Abilities**

*(1) Ability to organize work, set priorities, delegate tasks and responsibilities;

(2) Skill in interpersonal relationships in dealing with employees, team leaders, and managers;

*(3) Skill in assessing qualifications and abilities of current and prospective employees;

*(4) Ability to consult with radiologist to develop standard and non-standard treatment/exam protocols;
and

(5) Skill to independently perform general and specialized diagnostic radiologic procedures in advanced levels of complex treatment situations.

(6) GS-10

(a) **Experience.** Completion of 1 year of experience equivalent to the next lower grade level directly related to the position being filled, and must fully meet the KSAs at that level. In addition the candidate must meet following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Assignments.** 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. DRTs at this grade level may be appointed to one of the following assignments:

1. **Staff DRT.** Employees at this level who are not leads or supervisors may be assigned varying duties related to diagnostic imaging. Employees are trained to work in one or more difficult and complex modalities performing procedures related to these modalities as well as providing general diagnostic procedures in a therapeutic setting. At this grade level, it is expected that such assignments be unique, perhaps with expert specialization in complex areas of radiologic technology.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Thorough knowledge of radiation protection standards, devices and techniques including concepts of accumulated dosage and genetic changes;

*(2) Skill to recognize changes in equipment and procedures that might result in increased exposures, and recommend methods to prevent such exposures;

*(3) Knowledge of basic physics including concepts of energy, electric power, magnetic fields, and properties of x-ray, in order to understand the operation of the equipment; and

(4) Knowledge and skill in positioning of patients for a wide variety of difficult radiographic (CT, MRI, Special Procedures, Mammography, etc.) studies.

2. Diagnostic Radiologic Team Leader. Functions as a lead DRT for a group of DRTs. Provides a full range of general radiologic treatment procedures, has a broad knowledge of the different modalities within the diagnostic radiologic area, and is accountable to the next higher-level supervisor.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Ability to provide feedback to supervisor on technical aspects of work;

*(2) Ability to resolve informal employee complaints;

*(3) Ability to monitor and report on the status and progress of work, and make adjustments to accomplish the workload in accordance with established procedures; and

(4) Skill to independently perform general and specialized diagnostic radiologic procedures in advanced levels of complex treatment situations.

3. Supervisory Diagnostic Radiologic Technologist. Functions as a supervisor for a group of DRTs which may include support staff. Evaluates new products and equipment, making recommendations to supervisor concerning upgrades/new purchases that would improve operations. Informs higher level management of anticipated staffing variances and informally recommends promotions, reassignments, or other personnel changes such as retention or release of probationary employees, and recommending recognition of superior performance in the diagnostic radiologic area.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Ability to analyze organizational, technical, and administrative problems and to develop and implement solutions that result in efficient section operation;

*(2) Skill to evaluate quality management procedures and processes;

*(3) Ability to analyze and use data effectively to manage workload, quality, performance, and productivity;

*(4) Skill to develop new policies and guidelines as needed; and

(5) Skill in problem solving and conflict resolution.

(7) **GS-11**

(a) **Experience.** Completion of 1 year of experience at the next lower grade level, that is directly related to the position to be filled and that demonstrates possession of the knowledge, skills, abilities and other characteristics needed to provide services as a quality control technologist, diagnostic radiologic technology team leader, supervisory radiologic technologist, or an assistant chief radiologic technologist. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

**PART II
APPENDIX G25**

(b) **Assignments.** 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. DRTs at this grade level may be appointed to one of the following assignments:

1. Quality Management Technologist (QM). Performs daily inspection of radiographic units to ensure proper mechanical functionality. Performs daily sensitometric and densitometer testing on all x-ray film processors. Performs monthly, quarterly, semi-annual, and annual QC testing; i.e., dark room fog, sensitometer consistency, densitometer calibrations. Ensures daily functionality of CR readers. Provides in-service training to technologists and other personnel involved in the operation and maintenance of x-ray film processors, CR readers, and other PACS type of operations maintained within the department. Coordinates all scheduling of preventative maintenance for modalities either through biomedical engineering or local contractor service. Works with physicists to ensure compliance with radiation safety program and for acceptance testing of all new installations of equipment. Maintains accurate records, as required by management, for quality assurance analysis, quality control, performance improvement, and other related purposes.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Knowledge of all Joint Commission on Accreditation of Healthcare Organizations (JCAHO), Occupational Safety and Health Administration (OSHA), and VA standards regarding radiology quality assurance and other technical functions;

*(2) Skill to properly train staff on quality assurance and control;

*(3) Knowledge of Automated Management Information System (AMIS) preparation and fill usage reports for monthly and quarterly reporting of activity and usage data;

(4) Thorough knowledge of x-ray and other image-producing machinery, film processors, and intensifying screens in order to design and operate a complete radiology quality assurance program; and

(5) Knowledge of physics and chemistry to enable the incumbent to diagnose difficulties in x-ray machinery and processors.

2. Diagnostic Radiologic Technologist Team Leader. Functions as a lead technologist for a group of DRTs. Provides a full range of general radiologic treatment procedures and a broad knowledge of the different modalities within the diagnostic radiologic area, and is accountable to the next higher-level supervisor.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Skill in directing on-the-job training for employees;

*(2) Ability to evaluate work performance of lower level employees and recommend performance ratings;

*(3) Skill in technical planning and oversight to set and adjust work priorities, and assure that work requirements are met based on employee capabilities;

(4) Knowledge and skill to provide care appropriate to the age of the patients served, including knowledge of growth and development; and

*(5) Knowledge of medical center, VHA, and government-wide human resources management regulations, policies and procedures.

3. Supervisory Diagnostic Radiologic Technologist (Chief). Employees in this assignment assume full administrative and professional responsibility for planning and directing the radiologic technology program at a medical center or independent outpatient clinic that does not meet the level of complexity described at the GS-12 level for a chief radiologic technologist and has significant supervisory responsibility for staff.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Ability to develop and initiate new imaging services that apply current research findings;

*(2) Ability to participate as an instructor in the facility's in-service clinical training findings;

*(3) Skill to interview and evaluate candidates for positions in the section and recommend appointments, advancements, or, when appropriate, disciplinary actions;

*(4) Ability to evaluate performance, identify continuing education and training needs, etc.; and

*(5) Ability to analyze organizational, technical, and administrative problems and to develop and implement solutions that result in efficient section operation.

4. Supervisory Diagnostic Radiologic Technologist (Assistant Chief). This assignment is restricted to employees serving as a full assistant to a GS-12 chief radiologic technologist. Individuals in this assignment share full responsibility for managing the radiologic technology section.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of overall radiology department operations, and the ability to judge effectiveness of the operation;

*(2) Ability to monitor and evaluate subordinate supervisors' performance;

*(3) Ability to formulate plans, delegate authority, and follow-up on delegated tasks;

(4) Knowledge of new and recent developments in the field;

*(5) Skill in participating in organizational national initiatives and/or intra agency workgroups, or committees; and

*(6) Ability to draft and/or recommend organizational national policies and/or directives.

**PART II
APPENDIX G25****(8) GS-12**

(a) **Experience.** Completion of 1 year of experience comparable to the next lower grade level and must fully meet the KSAs at that level. Examples include:

1. Experience in a supervisory capacity or as a quality control technologist, or a diagnostic radiologic technology team leader;
2. Experience in planning or assisting in the establishment of a completely integrated radiologic technology program at a medical center or comparable facility; or
3. Experience in the management or administration of a radiologic technology or closely related program.

In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Assignments.** 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. DRTs at this grade level may be appointed to one of the following assignments:

1. **Supervisory Diagnostic Radiologic Technologist (Chief).** Assignment to this grade level is restricted to those serving as the chief radiologic technologist at medical facilities with comprehensive and complex radiographic and imaging programs. Employees in these assignments plan and direct the radiologic technology program at active, affiliated medical centers or outpatient clinics, and have full supervisory responsibility for a large staff of nonsupervisory personnel, including GS-10 DRTs, and at least 1 subordinate team leader or supervisor at the next lower grade level, and any clerical or administrative support staff. At this level, the radiologic technology program typically includes the full variety of specialties.

a. **Demonstrated Knowledge, Skills, and Abilities**

*(1) Ability to perform the full range of supervisory duties, including responsibility for assignment of work performed; performance evaluation; recommendations for appointment, awards, advancement, and, when appropriate, disciplinary actions; and identification of continuing education and training needs;

(2) Skill to serve as a consultant to other facility personnel in evaluating and planning radiologic technology services for the most complex cases;

*(3) Ability to participate in research studies and/or as a consultant to others conducting research;

*(4) Ability to consult with staff and resident physicians through patient presentation, attending ward rounds, and specialty clinics and/or conferences, etc.; and

*(5) Skill to assess, plan, and evaluate the delivery of radiologic technology services at the facility.

2. **Radiology Administrator.** Assignment to this grade level is restricted to those serving as the radiology administrator at medical facilities with comprehensive and complex radiographic and imaging

programs. Employees in these assignments plan and direct the technical and administrative operations of the radiology program at active, affiliated medical centers, and have full supervisory responsibility for a large staff of nonsupervisory personnel, including GS-10 DRTs, at least 1 subordinate team leader or supervisor at the next lower level, and the clerical and administrative support personnel. At this level, the radiologic technology program typically includes the full variety of specialties.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Knowledge of the fiscal matters of the radiology program, including VHA funds and several additional fund controls, and ability to administer the scarce medical specialist contracts for professional services;

*(2) Skill to make short and long-term supply, equipment, and major space alteration recommendations, and prepare specifications for radiographic equipment purchases and remodeling requests;

(3) Ability to recommend program effectiveness improvements to meet VHA and JCAHO accreditation standards;

*(4) Ability to make and implement major managerial recommendations for the radiology program, such as organizational improvements including changes in structure and delegation; maintain realistic cost/benefit ratios; and policy and procedure changes to improve service to patients; and

*(5) Ability to perform the full range of supervisory duties, including responsibility for assignment of work performed; performance evaluation; recommendations for appointment, awards, advancement, and, when appropriate, disciplinary actions; and identification of continuing education and training needs.

(9) GS-13

(a) **Experience.** Completion of 1 year of experience comparable to the next lower grade level and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

*1. Knowledge of national initiatives and/or intra-agency workgroups or committees;

2. Ability to draft and/or recommend national policies and/or directives;

*3. Ability to perform VHA Central Office special projects and activities; and

4. Skill in managing resources, i.e., space, equipment, supplies, personnel at the national level.

(b) **Assignments.** 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. DRTs at this level function as program specialists responsible for the management of national initiatives having a high degree of visibility and a significant impact on VHA health care delivery. Examples include national initiatives in the care and treatment of patients, educational programs, program evaluation, quality assurance, etc. These programs typically include collaboration with other Federal and State agencies, professional organizations, etc.

PART II

APPENDIX G25

4. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for diagnostic radiologic technologists in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements on the proposed grade.

b. Under no circumstances will the certification requirements of radiologic competence and ARRT (R) certification/registration be waived.

c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

**APPENDIX G26. THERAPEUTIC RADIOLOGIC TECHNOLOGIST
QUALIFICATION STANDARD
GS-648
Veterans Health Administration**

1. COVERAGE. The following are the requirements for appointment as a Therapeutic Radiologic Technologist (TRT) in the Veterans Health Administration (VHA). TRTs assist in the localization of tumors, participate in treatment planning, and deliver high doses of ionizing radiation as prescribed by the radiation oncologists. These requirements apply to all VHA TRTs in the General Schedule (GS)-648 series.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified candidates in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Certification**

(1) All applicants must be certified in therapeutic radiologic technology by the American Registry of Radiologic Technology (ARRT) (T).

(2) Certification in Medical Dosimetry is not a basic requirement for this occupation; however, it is strongly desirable as evidence of possession of the essential knowledge, skills, and abilities. Certification is required for assignments at the GS-12 grade level.

c. **Experience or Education.** Completion of a program in therapeutic radiologic technology, evidenced by a certificate or an associate's degree, accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT); certification by the American Registry of Radiologic Technologists (ARRT) in Radiology, and the subsequent completion of a 12-month JRCERT approved program in therapeutic radiologic technology. JRCERT is the accrediting agency for the radiation therapy programs recognized by the US Department of Education.

(1) Public Law 97-35 requires that persons who administer radiologic procedures meet the credentialing standards in 42 CFR Part 75. Essentially, they must have successfully completed an educational program that meets or exceeds the standards described in that regulation, and is accredited by an organization recognized by the Department of Education, and be certified (registered) as radiation therapists in their field.

(2) Non-certified applicants who otherwise meet the eligibility requirements for ARRT (T) certification may be given a temporary appointment as a graduate TRT under the authority of 38 U.S.C. § 7405 (a) (1) (D). Failure to obtain certification during that period is justification for termination of the temporary appointment. This may result in termination of employment.

(3) **Loss of Credential.** An employee in this occupation who fails to obtain licensure/certification/registration within the required time frame, or who fails to maintain the required licensure/certification/registration must be removed from the occupation, which may also result in termination of employment.

**PART II
APPENDIX G26**

For occupations which require an active credential (licensure/certification/registration) at all grade levels, at the discretion of the appointing official, an employee may be reassigned to another occupation for which he/she qualifies if a placement opportunity exists. For occupations which require an active credential (licensure/certification/registration) in assignments above the full-performance level only, at the discretion of the appointing official, an employee may remain at an appropriate lower grade level in the occupation when both of the following apply: the credential is not a requirement and a placement opportunity exists.”

d. Grandfathering Provision. The following is the standard grandfathering policy for all Title 38 Hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/ registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

NOTE: Each uncertified VA Therapeutic Radiologic Technologist who was permanently employed on June 21, 1986, and whose competence in the safe administration of ionizing radiation was affirmed, in writing, by a VA licensed physician not later than January 1, 1987, is considered fully qualified. These

employees may be promoted, demoted or reassigned within the GS-648 occupational series. Any employee initially retained in this manner who leaves this job series loses protected status and must meet the full requirements in effect at the time of reentry.

e. **Physical Requirements.** The work requires long periods of standing and walking. There is some bending and carrying of moderately heavy articles such as film cassettes, treatment devices, and molds with heavier lifting of wedges and specially designed shielding blocks. Patients often are assisted to achieve proper positioning, which may require reaching, lifting, or working in strained positions. The deterioration of the patient due to disease progression often requires lifting of the patient from stretchers or wheelchairs to treatment and examination tables utilizing special techniques designed to minimize the discomfort of the patient. See VA Directive and Handbook 5019.

f. **English Language Proficiency.** TRTs must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS

a. Definitions

(1) Creditable Experience

(a) **Knowledge of Current Therapeutic Radiologic Technology Practice.** To be creditable, experience must have demonstrated possession of the knowledge, skills, abilities, and other characteristics associated with current therapeutic radiologic technology practice including Picture Archiving Communication Systems (PACS), digital imaging, and Computed Radiography (CR) readers.

(b) **Quality of Experience.** Experience is only creditable if it was earned after completion of the basic requirements identified in paragraph 2.b. above. Experience as a graduate TRT is creditable provided the candidate functioned as a TRT and subsequently passed the certification examination.

(c) **Part-Time Experience.** Part-time experience as a TRT is creditable according to its relationship to full-time workweek. For example, a TRT would receive 1 week of full-time credit for each 2 weeks of half-time work.

(2) **Specialized Assignment Definitions.** Specialized areas of therapeutic radiologic technology include general therapeutic radiologic technology, simulation, mold room, treatment planning, and medical dosimetry.

(a) **General Therapeutic Radiologic Technology.** Therapeutic radiologic technologists administer ionizing radiation to specifically determined sites, following prescriptions of the radiation oncologist to deliver high dose levels of ionizing radiation to predetermined areas of malignant tumors as well as certain benign disorders. The objective of the radiation treatments and procedures is to accurately deliver a therapeutic dose level of ionizing radiation to a precise site. The therapists utilize combinations of wedges, blocks, treatment devices, multileaf collimators, record and verify systems, portal vision, and other specialized methodologies to accomplish treatment goals in accordance with State and Federal regulations.

**PART II
APPENDIX G26**

(b) **Simulation.** Simulation utilizes X-ray and Positron Emission Tomography (PET)/Computerized Axial Tomography (CT) imaging to produce multiple axial computer generated images of the human anatomy with emphasis placed on areas determined to be relevant to treatment fields planned to be irradiated with high energy ionizing radiation following the written prescription of the radiation oncologist. This includes selecting and designing multiple types of positioning devices, with positioning and restraint methods addressed to maximize accuracy of positioning for reproduction during treatment process, and addressing the numerous complications brought about by the disease processes. Accuracy of the method used to attain PET/CT images during simulation procedures with data transfer to dosimetry and subsequently to the treatment machines is critical to the reproductively level of planned treatment fields.

(c) **Mold Room.** Mold room technology utilizes many varied types of materials and methodologies to design and fabricate molds, shields, stints, bite blocks, positioning devices and other specified devices as prescribed by the radiation oncologist. Mold room functions are varied and present high-level challenges in designing and fabricating devices to be used in a wide variety of situations, e.g., removal of nose, eye, ear, tissue loss due to extensive surgical procedures resulting in removal of or loss of uniformity in anatomical structures.

(d) **Treatment Planning.** 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. The treatment planning team is comprised of the radiation oncologist, the physicist, the dosimetrist, and the therapeutic radiologic technologist. Each of these members brings a unique contribution to the treatment planning process.

(e) **Medical Dosimetry.** The medical dosimetrist is a member of the radiation oncology team who has an in depth knowledge of high dose ionizing radiation and of the overall characteristics and clinical relevance of radiation oncology treatment machines and equipment; is cognizant of procedures commonly used in brachytherapy; and has the education and expertise necessary to independently generate radiation dose distributions and dose calculations in collaboration with the medical physicist and radiation oncologist. The TRT-Dosimetrist may attain certification in one of two ways, either a progressive learning program within radiation oncology overseen by a qualified medical physicist and radiation oncologist encompassing approximately 3 years of intense training and education or with the completion of a 1-year intensive course in an approved medical dosimetry program, and then taking and achieving board certification as a Certified Medical Dosimetrist (CMD).

b. **Grade Determinations.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates.

(1) **GS-5**

(a) **Experience or Education.** None beyond the basic requirements.

(b) **Assignment.** Employees at this level serve in TRT career development positions. It is expected that they receive guidance from more experienced staff members for more complex patient issues and require daily and direct supervision.

(2) **GS-6**

(a) **Experience.** At least 1 year of experience equivalent to the next lower grade level that demonstrates the core competencies described at that level and which demonstrates possession of the knowledge, skills, abilities, and other characteristics needed to provide radiation therapy services. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Education.** The successful completion of a 4-year baccalaureate degree program in radiation therapy or other health related field.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of operation of radiation detection devices;
2. Ability to determine appropriateness of posted signs;
3. Knowledge of basic nursing procedures and patient support devices;
4. Skill to operate appropriate patient support devices; and
5. Ability to communicate both orally and in writing with patient.

(d) **Assignment.** Candidates at this grade level serve as staff TRTs in developmental or advanced entry level assignments. It is expected that they receive guidance from more experienced staff members for more complex patient issues and require direct supervision in any assignment of radiation therapy.

(2) **GS-7**

(a) **Experience.** At least 1 year of experience equivalent to the next lower grade level that demonstrates the knowledge, skills, and abilities (also referred to as “core competencies”) described at that level. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Education.** The successful completion of 1 full academic year of graduate education leading to a degree program in radiation therapy or other field directly related to therapeutic radiology. Education may relate to the duties of a specific position or to the occupation, but must be appropriate for the position being filled.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of radioactive package types;
2. Knowledge of Nuclear Regulatory Commission (NRC) regulations;

**PART II
APPENDIX G26**

3. Knowledge of types, characteristics and proper use of personal monitoring devices;
4. Knowledge of quality control procedures to evaluate machine output and operation;
5. Knowledge of examination preparation and contraindications; and
6. Ability to communicate orally exam preparations/special orders to patients and hospital staff.

(d) **Assignment.** Staff TRT assignments at this level represent the advanced developmental level leading to the full performance level, performing a substantially full range of duties but receiving guidance and directions regarding unfamiliar or unusual situations for more complex patient issues. Employees may also be assigned to lead positions at this level.

1. **Staff TRT.** Candidates at this grade level are to be qualified to provide services in specialized areas of therapeutic radiology listed above and/or in general therapeutic radiologic technology services.

2. **TRT Team Leader.** Functions as a lead TRT for a group of TRTs at lower levels who provide the full range of therapeutic radiologic procedures, but with some oversight. Typical assignments include, but are not limited to, providing technical oversight necessary for accomplishing the work of the organizational unit; planning, directing, and distributing the work to TRTs at lower grade levels; providing feedback to supervisor on technical aspects of the work; resolving informal employee complaints; instructing and training TRTs on newly acquired equipment; and independently performing a variety of general or specialized procedures on more complex cases.

(3) **GS-8**

(a) **Experience.** At least 1 year of experience equivalent to the next lower grade level that demonstrates the core competencies described at that level, i.e., experience that demonstrates possession of the KSAs needed to provide therapeutic radiologic services in any specialized area. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of consultation, simulation, treatment planning, and treatment procedures;
2. Ability to recognize abnormalities in relevant lab procedures and notify oncologist/nurse of abnormalities;
3. Knowledge of various energy and output levels of radiation treatment machines;
4. Knowledge of different types of radioactive sources;
5. Skill to operate equipment to determine correct dose and field uniformity; and

6. Knowledge of computer operations to insure proper control of patient data input to insure accuracy of data output and of complex computer applications relating to treatment plan.

(c) **Assignment.** Employees at this level serve as staff TRTs at the full performance level and may be appointed to one of the following assignments:

1. **Staff TRT.** Candidates at this grade level are to be qualified to provide services in the specialized areas of therapeutic radiologic technology listed above and/or in general therapeutic radiologic technology services. Dosimetry assignments at this level are developmental in nature.

2. **TRT Team Leader.** Functions as a lead TRT for a group of lower level TRTs who provide the full range of therapeutic radiologic technology services. Provides feedback to supervisor on the technical aspects of the work. Evaluates new products and equipment and makes recommendations to supervisory concerning developments that would improve operations. Ensures all equipment is in safe working order, reporting all equipment problems as appropriate. Maintains supplies for the work areas.

(4) **GS-9**

(a) **Experience.** At least 1 year of experience equivalent to the next lower grade level directly related to the position being filled and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** Additional assignment-specific KSAs are listed with the assignments that follow.

1. Knowledge of hazardous materials in the handling and fabrication of special molds, blocks, and compensators;

2. Skill in operating highly complex and technical equipment including linear accelerators, teletherapy units, patient management systems, record and verify systems, electronic portal imaging, 3-D conformal radiation therapy systems, multi-leaf collimator, and intensity modulated radiation therapy (IMRT);

*3. Ability to recognize abnormalities in relevant lab procedures and notify oncologist/nurse of abnormalities;

4. Ability to determine the appropriate timely sequence for patient studies and any special orders required; and

*5. Ability to coordinate scheduling of simulation, planning, and treatment procedures.

(c) **Assignments.** Employees at this level serve as staff TRTs independently carrying out procedures which have varying assignments, including special and complex therapeutic radiological procedures, which exceed the full performance level. Regardless of the nature of the specific assignment, the work must be of sufficient scope and complexity to meet the knowledge, skills, and abilities to perform at this level. They

**PART II
APPENDIX G26**

may be assigned to any area of radiation therapy and be assigned lead or supervisory positions. 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.

1. Staff TRT. Candidates at this grade level function as staff TRTs and are able to carry out their assigned tasks with minimal supervisory controls. Apply full knowledge in compliance with Nuclear Regulatory Commission (NRC) regulations in handling and storage of radioactive materials and the education of patient, family, and staff of procedures to follow after the administration of ionizing radiation. Inspect equipment for safety and operability and troubleshoots for problems. Schedule patient treatments and needed studies, ensuring appropriate sequence of multiple procedures and interacts with staff regarding examination preparation.

2. Therapeutic Radiologic Technology Team Leader. Functions as a lead TRT for a group of TRTs who provide the full range of general therapeutic radiologic oncology treatment procedures. Provides technical oversight necessary for accomplishing the work of the radiation oncology unit. Plans, directs, and distributes work assignments to therapeutic radiologic technologists at lower grade levels. Provides feedback to supervisor on the technical aspects of work. Resolves informal employee complaints and approves leave request for a few hours or in emergency situations. Instructs and trains TRT staff on newly acquired equipment.

*a. Ability to provide technical oversight and assign personnel and tasks to be accomplished in a manner that assures completion of the workload utilizing personnel to the greatest advantage thus providing the optimal level of patient care within the workday;

*b. Ability to plan, direct, and distribute work assignments to TRTs at lower grade levels;

*c. Skill in instructing and training TRTs on newly acquired equipment; and

*d. Ability to plan and project staffing needs.

3. Supervisory Therapeutic Radiologic Technologist. Functions as a supervisor for a group of TRTs who provide general therapeutic radiologic radiation oncology services. Plans work schedules to assure an even flow and distribution of work, adjusting work assignments as needed for daily operation; sets deadlines and priorities; identifies equipment requirements; recommends methods to improve productivity; and continuously reviews treatment procedure and delivery. Oversees attendance and leave of employees, including approval of ordinary sick and annual leave requests and vacation schedules. Informs higher level management of anticipated staffing variances and recommends promotions, reassignments, or other personnel changes such as retention or release of probationary employees, periodic step increases, and recommending recognition of superior performance in the therapeutic radiologic oncology area.

*a. Ability to organize work, set priorities, and delegate tasks and responsibilities;

*b. Skill in interpersonal relationships in dealing with employees, team leaders, and managers;

*c. Skill in assessing qualifications and abilities of current and prospective employees;

*d. Ability to consult with radiation oncologist to develop standard and non-standard treatment/exam protocols; and

*e. Ability to independently perform general and the most complex therapeutic radiological procedures in advanced levels of complex treatment situations.

4. **TRT (Dosimetrist).** Employees at this level are fully functional as Staff TRTs and are able to carry out procedures as Dosimetrists under general supervision. This represents the advanced developmental level leading to the full performance level for Dosimetrist assignments. Certification in medical dosimetry (CMD) is highly desirable.

a. Knowledge of computer treatment planning and patient treatment plans and the ability to follow the prescription outlined by the radiation oncologist;

b. Knowledge of quality 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 preparation and design of custom molds, boluses, templates, and compensating devices; and

*d. Ability to assist in computed tomography (CT) scans for tumor localization in radiation treatment planning, and performs accurate patient contours for transfer to treatment planning devices

(5) **GS-10**

(a) **Experience.** At least 1 year of experience equivalent to the next lower grade level that demonstrates the core competencies described at that level, and must fully meet the KSAs at the next lower level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs are defined in the assignments which follow.

(c) **Assignment.** TRTs at this grade level may be appointed to one of the following assignments. 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:

1. **Staff TRT.** Employees at this level who are not leads or supervisors are able to carry out their assigned tasks independently in all areas of radiation therapy, requiring TRT competencies which substantially exceed the full performance level and are unique and require advanced knowledge in all areas of radiation therapy specialties. Regardless of the nature of the specific assignment, the work must be of sufficient scope and complexity to meet the knowledge, skills, and abilities to perform at this grade level.

a. Ability to confer with radiation oncologist regarding simulation/CT procedure needed to yield the most optimal images needed for treatment planning procedures to be performed;

**PART II
APPENDIX G26**

b. Knowledge of disease process, co-morbid conditions, and other factors relating to individual patients in selecting appropriate positioning devices for procedure to be performed;

c. Knowledge of radiographic fluoroscopic, CT, and combinations of modalities and ability to obtain the images for review by the radiation oncologist for localization of tumors, their extent, and ancillary areas needing treatment; and

*d. Ability to accurately transfer radiographic images to treatment planning and dosimetry for use in development of computer generated treatment plans.

2. Dosimetrist (Treatment Planning). Employees at this level are fully functional as TRTs and are able to carry out their assigned tasks independently. This is considered to be the full performance level for Dosimetrist assignments. Certification in medical dosimetry (CMD) is highly desirable.

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 quality 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 preparation and design of custom molds, boluses, templates, and compensating devices; and

*d. Ability to coordinate and assist in computed tomography (CT) scans for tumor localization in radiation treatment planning, and perform accurate patient contours for transfer to treatment planning devices.

3. Therapeutic Radiologic Team Leader. Functions as a lead TRT for a group of TRTs. Provides the full range of radiation therapy procedures, has a broad knowledge of the different modalities within the therapeutic radiologic area, and is accountable to the next higher-level supervisor.

*a. Ability to provide technical oversight and assign personnel and tasks to be accomplished in a manner that assures completion of the workload utilizing the personnel to the greatest advantage thus providing the optimal level of patient care within the workday;

*b. Ability to plan, direct, and distribute work assignments to therapeutic radiologic technologists at lower grade levels;

*c. Skill in instructing and training therapeutic radiologic technologists on newly acquired equipment; and

d. Knowledge of contrast medium, contraindications to contrast medium, and adverse reactions to contrast medium.

4. Supervisory Therapeutic Radiologic Technologist. Functions as a supervisor for a group of TRTs which may include support staff, and lower level lead and/or supervisory TRTs. Advises employees of the performance requirements of their positions; informs them of their progress in meeting the requirements; and prepares formal evaluations of employee performance. Holds corrective interviews with employees,

referring disciplinary problems to higher levels of management; resolves informal complaints of employees; deals with union representatives on matters involving action by an immediate supervisor. Provides technical supervision necessary for accomplishing the work of the therapeutic radiologic oncology area.

- a. Ability to organize work, set priorities, and delegate tasks and responsibilities;
- *b. Skill in interpersonal relationships in dealing with employees, team leaders, and managers;
- *c. Skill in assessing qualifications and abilities of current and prospective employees;
- d. Ability to confer with radiation oncologist to develop standard and non-standard treatment/exam protocols; and
- e. Skill to independently perform general and specialized therapeutic radiologic oncology procedures in advanced level of complexity treatment situations.

(6) **GS-11**

(a) **Experience.** Completion of at least 1 year of experience equivalent to the next lower grade level, that is directly related to the position to be filled and that demonstrates possession of the knowledge, skills, and abilities needed to provide services as a dosimetrist, therapeutic radiologic technology team leader, or supervisory TRT, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Certification.** For employees in a dosimetrist position at this level, certification in medical dosimetry (CMD) is highly desirable.

(c) **Demonstrated Knowledge, Skills, and Abilities.** KSAs are defined in the assignments which follow.

d) **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. TRTs at this grade level may be appointed to one of the following assignments:

1. Staff TRT (Dosimetrist). Employees at this level are fully functional and are able to carry out their assigned tasks independently in all areas of radiation therapy, requiring TRT competencies which substantially exceed the full performance level. Regardless of the nature of the specific assignment, the work must be of sufficient scope and complexity to meet the knowledge, skills, and abilities to perform at this grade level. The candidate at this position is either a TRT who has additional assignments or a dosimetrist.

a. Ability to apply in depth knowledge of anatomy, physiology, and numerous types of tumors and their routes of spread to design multiple plans for oncologist approval and selection;

b. Ability to calculate the needed monitor units according to oncologist prescription with distributions of the dose to be delivered in various ratios applying extensive knowledge of critical structures and their tolerances to accurately deliver the prescribed dose; and

**PART II
APPENDIX G26**

*c. Ability to troubleshoot and assist other TRTs in the resolution of patient set-up problems.

2. Therapeutic Radiologic Team Leader. Functions as a lead TRT for a group of TRTs. Provides a full range of general therapeutic radiologic oncology treatment procedures and a broad knowledge of the different modalities within the therapeutic radiologic oncology area and is accountable to the next higher-level supervisor.

a. Ability to provide feedback to supervisor on technical aspects of work;

*b. Ability to resolve informal employee complaints;

*c. Ability to monitor and report on the status and progress of work and make adjustments to accomplish the workload in accordance with established procedures; and

d. Ability to independently perform general and specialized therapeutic radiologic oncology procedures in advanced level of complexity treatment situations.

3. Supervisory Therapeutic Radiologic Technologist. Functions as a supervisor for a group of TRTs which includes employees assigned to TRT positions above the full performance level. Evaluates new products and equipment to make recommendations to supervisor concerning upgrades or new purchases that would improve operations. Informs higher level management of anticipated staffing variances and recommends promotions, reassignments, or other personnel changes such as retention or release of probationary employees, periodic step increases, and recommending recognition of superior performance in the therapeutic radiologic oncology area.

*a. Ability to analyze organizational and operational problems and to develop and implement solutions that result in efficient section operation;

*b. Ability to evaluate quality management procedures and processes;

*c. Ability to analyze and use data effectively to manage workload, quality, performance, and productivity;

*d. Ability to develop new policies and guidelines as needed; and

e. Skill in problem solving and conflict resolution.

(7) GS-12

(a) **Experience.** At least 1 year of 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. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Certification.** For employees in a dosimetrist position at this level, certification in medical dosimetry (CMD) is required.

(c) **Demonstrated Knowledge, Skills, and Abilities.** KSAs are defined in the assignments which follow.

(d) **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. TRTs at this grade level may be appointed to one of the following assignments.

1. Staff TRT (Dosimetrist). Employees at this level are fully functional as a dosimetrist with the knowledge and experience to apply an advanced level of treatment planning and dosimetry procedures. Employees will have an in depth knowledge of computer programs and operations, and methodologies of data transfer and reconstruction. Performs complex 2D-3D treatment plans and presents to radiation oncologists for review and acceptance. Serves as an integral team member for brachytherapy procedures, utilizing ultrasound to determine volumetric data, positioning of templates for insertion of radioactive sources, and transfer of data from ultrasound equipment to treatment planning computers for generation of dose volume histograms (DVH).

*a. Ability to perform quality assurance procedures for brachytherapy procedures and oversee brachytherapy planning;

*b. Ability to develop and update policy and procedures for the dosimetry area with the oversight of the medical physicist;

c. Ability to work with the medical physicist to perform monthly, quarterly, semi-annual, and annual testing of equipment. Verifies accuracy of machine setting, output, congruence, and other mandated measurements, recording them accurately for review;

d. Extensive knowledge level of human anatomy, physiology, malignant tumors, routes of spread, critical structures, and tolerance levels of all sites of the body to plan complex, multi-field treatment plans; and

*e. Skill to oversee initial set-ups of complex treatment plans, giving assistance as needed to make any modifications needed prior to any treatment being administered.

2. Supervisory Therapeutic Radiologic Technologist. Functions as a TRT supervisor with full administrative and professional responsibility for planning and directing the work of TRTs and support staff in the medical center's therapeutic radiologic technology program. Develops and updates technical policy and procedure manuals. Develops and implements department and medical center guidelines and policies. Maintains timely records of equipment and/or use and its problems, competency of the technical staff, current technical protocols, radiation safety, and quality management for a teleimaging network. Ensures all staff and affiliate staffs are in compliance with accrediting and regulating bodies. Adjusts staffing levels or work procedures to accommodate resource allocation decisions made at the executive level. Provides for the budgeting and financial management of the radiation oncology service.

a. Knowledge of systematic data collection;

*b. Ability to balance staffing levels and work procedures within resources allocated;

*c. Ability to coordinate staffing and work procedures with resources allowed;

PART II

APPENDIX G26

*d. Ability to evaluate and adjust resources when needed;

*e. Knowledge of budget allocation and finances and ability to utilize resources and remain within allocated budget; and

*f. Ability to manage and direct work of others to accomplish program goals.

4. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for TRTs in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements on the proposed grade.

b. Under no circumstances will the basic certification requirements of radiologic competence and ARRT (T) certification/registration, or certification in medical dosimetry where required, be waived.

c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

**APPENDIX G27. MEDICAL INSTRUMENT TECHNICIAN
QUALIFICATION STANDARD
GS-649
Veterans Health Administration**

1. COVERAGE. The following are requirements for appointment as a Medical Instrument Technician (MIT) in the Veterans Health Administration (VHA). This series includes positions that perform diagnostic examinations or medical treatment procedures as part of the diagnosis and treatment of patients. The work involves operating or monitoring diagnostic and therapeutic medical instruments and equipment associated with cardiac catheterization, pulmonary examinations and evaluations, heart bypass surgery/heart-lung transplant surgery (perfusion), electrocardiography, electroencephalography, polysomnography, hemodialysis, ultrasonography, and vascular sonography. Positions in this series require knowledge of the capabilities and operating characteristics of one or more kinds of instruments and a practical knowledge of human anatomy and physiology. Positions also require a practical understanding of medical data generated by patient/equipment connections. Some positions may also require a practical knowledge of chemistry, pharmacology, physics, and mathematics.

Coverage under this standard and assignment of individuals to this occupation are restricted to the specific subspecialties identified above and those DIRECTLY DERIVED from these current subspecialties. For example, electroencephalography and polysomnography technicians perform duties using the same types of equipment and measure brain waves, the primary difference being the wake or sleep state of the patient. No individual will be assigned to this series (GS-649) without an approved parenthetical title.

Any additional parenthetical specialties developed as the result of new technologies must be directly derived from current specialties and must be approved by the Office of Human Resources Management & Labor Relations, Compensation & Classification Service (055) in VA Central Office (VACO). Only after a decision has been made to include the identified new specialty in this qualification standard, and an approved parenthetical title and code have been developed, will an individual be assigned to this series.

2. BASIC REQUIREMENTS

- a. **Citizenship.** Citizenship of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified citizens in accordance with chapter 3, section A, paragraph 3g, this part.)
- b. **Education.** There are no specific educational requirements for this occupation. Education may be substituted for experience only at the GS-4 and GS-5 levels. See the grade requirements part of this standard for information regarding educational substitutions.
- c. **Licensure or Certification.** Licensure or Certification is not required for this occupation; however, it is strongly desirable at GS-6 or above as evidence of possession of the essential knowledge, skills, and abilities. For certain functional areas at the higher levels or supervisory assignments, specific certifications appropriate to the specialty are indicated in this standard under "Titles and Certification/Registrations".

**PART II
APPENDIX G27**

For all specialties identified in this standard, Basic and Advanced Cardiac Life Support certifications are desirable. Training which does not result in official certification does not meet this definition.

d. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 Hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/ registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

e. **Physical Requirements.** See VA Directive and Handbook 5019.

f. **English Language Proficiency.** Medical Instrument Technicians must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS

a. **Definitions:** For purposes of this qualification standard the specialty areas of this occupation have been grouped into six functional areas. These are:

Cardiovascular (Electrocardiograph Technician, Cardiac Catheterization Technician)
Medical (Hemodialysis Technician)
Surgical (Perfusion Technician, Anesthesia Technician)
Neurology (Electroencephalograph Technician, Polysomnography Technician)
Pulmonary (Pulmonary Function Technician), and
Imaging (Diagnostic Ultrasound Technician, Echocardiograph Technician, and Vascular Technician).

Medical Instrument Technicians at GS-6 and above will have a functional assignment and reference should be made to the appropriate appendix for qualifications evaluation.

Grade level criteria, KSAs (core competencies), and typical assignment information for all GS-4 and GS-5 levels are defined generically in this part of the qualification standard. For higher level positions where the grade level/assignment is based on supervisory and/or managerial responsibilities, criteria are also included in the general portion of this qualification standard (for individuals in multiple function assignments) and/or the specific appendices.

For non-supervisory positions at GS-6 and above and for supervisory positions in a single specialty, the grade level criteria, KSAs, and types of assignments are discussed in appendices matching the title areas listed below. Reference should be made to the appropriate appendix in evaluating the qualifications of individuals for this occupation.

(1) **Titles and Certifications/Registrations:** All individuals assigned to this occupation MUST have an approved parenthetical title. For individuals at the GS-4 and GS-5 levels, the approved title will be Medical Instrument Technician (Trainee). For supervisory positions over two or more approved specialties, the approved title will be Supervisory Medical Instrument Technician (Multiple Function). Supervisors over a single specialty will have that specialty as the parenthetical title; for example, Supervisory Medical Instrument Technician (Cardiac Catheterization). Non-supervisory individuals whose assignments involve two or more specialty areas will be assigned the parenthetical title for the predominant specialty considering both the intended function and qualifications background of the individual.

(a) **Anesthesia Technicians** perform logistical and technical support to anesthesiologists and nurse anesthetists. They maintain anesthesiology supplies and equipment, set-up anesthetizing locations and operate, monitor, and collect data from anesthesia related equipment. In some cases Anesthesia Technicians will perform clinical laboratory functions, equipment preventive maintenance/repair, and specialized cardiac procedures such as cardiac output measurement, intra-aortic balloon pumping, vessel cannulation, and autotransfusion services. Certification at two distinct levels is offered by the American Society of Anesthesia Technologists and Technicians (ASATT). (See Appendix A)

(b) **Cardiac Catheterization Technicians** perform, under a physician's direction, diagnostic tests, both invasive and noninvasive, of the pulmonary system (lung) and the cardiovascular system (heart and circulation). They operate, monitor, and collect data from instruments used in procedures such as

PART II
APPENDIX G27

cardiac catheterization, angiography, valvuloplasty, angioplasty, electrophysiology studies, cardiac pacing, or cardiac pacemaker or leadwire insertion. Registration is offered by Cardiovascular Credentialing International (CCI) as a Registered Cardiovascular Invasive Specialist (RCIS). (See Appendix B)

(c) **Diagnostic Ultrasound Technicians** operate diagnostic ultrasonic scanning equipment to produce cross sectional and two dimensional pictures of internal organs and body structures used to diagnose diseases and other medical conditions. Registration is offered by Cardiovascular Credentialing International (CCI) or by the American Registry of Diagnostic Medical Sonographers (ARDMS). (See Appendix C)

Positions should be assigned to the Diagnostic Radiologic Technologist (DRT), GS-647 series, when both ultrasound and other modalities which require the delivery of ionizing radiation are performed. Positions in which ultrasound duties are performed exclusively (no other modalities are performed), should be assigned to the Medical Instrument Technician, GS-649 series, since ultrasound duties solely do not require the delivery of ionizing radiation.

(d) **Echocardiography Technicians** operate diagnostic equipment to graphically record the position and motion of the heart walls or the internal structure of the heart and neighboring tissue by the echo obtained from beams of ultrasonic waves directed through the chest wall. Registration is offered by Cardiovascular Credentialing International (CCI), as a Registered Cardiac Sonographer (RCS) or by the American Registry of Diagnostic Medical Sonographers (ARDMS) as a Registered Diagnostic Cardiac Sonographer (RDCS). (See Appendix D)

(e) **Electrocardiograph Technicians (EKG)** operate instruments used to record electrocardiograms, exercise tolerance tests, 24-48 heart monitoring and scanning, and pacemaker evaluations. Certification is offered by Cardiovascular Credentialing International (CCI) as a Certified Cardiographic Technician (CCT). (See Appendix E)

(f) **Electroencephalograph (EEG) Technicians** operate the electroencephalograph and other devices such as evoked potential equipment to record the electrical activity of the brain. Registration is offered by the American Board of Registration of EEG, CNIM & EP Technologists (ABRET) or the American Association of Electrodiagnostic Techs (AAET). (See Appendix F)

(g) **Hemodialysis Technicians** operate and monitor kidney dialysis instruments to provide dialysis treatment to patients with kidney failure or to maintain patients with irreversible kidney disorders. The agencies that offer national certification are Nephrology Certification Commission (NNCC), Board of Nephrology Examiners, Inc., Nursing and Technology (BONENT), National Nephrology Certification Organization (NNCO), and the International Certification Commission for Clinical Engineering and Biomedical Technology (ICC) in conjunction with the United States Certification Commission (USCC). (See Appendix G)

(h) **Perfusion Technicians** operate the heart-lung apparatus to take over functions of the patient's heart and lungs during coronary bypass surgery, heart and/or lung transplantation surgery, valve replacement, or respiratory failure. Certification is offered by the American Board of Cardiovascular Perfusion (ABCP). (See Appendix H)

(i) **Polysomnography Technicians** operate the electroencephalograph and other devices to record the electrical activity of the brain during sleep. Registration is offered by the Board of Registered Polysomnographic Technologists (BRPT). (See Appendix I)

(j) **Pulmonary Function Technicians** operate instruments to perform blood gas analysis; bronchoscopy with lung sampling; cardiopulmonary exercise stress tests; lung volume tests including spirometry (both pre and post medication); total lung capacity, functional residual capacity, and flow volume loops. Certification (RPFT) is offered by the National Board of Respiratory Care. (See Appendix J)

(k) **Vascular technicians** or **vascular sonographers** operate diagnostic equipment using ultrasound to record vascular information such as vascular blood flow, blood pressure, limb volume changes, oxygen saturation, cerebral circulation, peripheral circulation, and abdominal circulation. Registration is offered by Cardiovascular Credentialing International, (CCI) as a Registered Vascular Specialist (RVS) or by the American Registry of Diagnostic Medical Sonographers (ARDMS) as a Registered Vascular Technologist (RVT). (See Appendix K)

(2) **Creditable Experience - Knowledge of Current Medical Instrument Technician Practices.** To be creditable, the experience must have required the use of knowledge, skills, abilities and other characteristics associated with current Medical Instrument Technician practice appropriate to the identified specialty area.

(3) **Quality of Experience.** Experience is only creditable if it is equivalent to at least the next lower grade level and is directly related to the position/specialty to be filled.

(4) **Part-time Experience.** Part time experience is credited according to its relationship to a full time work week. For example, an individual employed 20 hours per week, or on a ½ time basis would receive one work week credit for each two weeks of service.

(5) **Fellowships.** N/A

(6) **Internships.** N/A

b. **Grade Determinations.** In addition to the basic requirements for employment, the criteria discussed in the applicable headings, or that defined in the appendices, must be met when determining the grade of candidates.

c. **Education/Training.** To be creditable education must have been gained in an accredited Community College, College, or University.

Foreign Education: To be creditable, education completed outside the U.S. must have been submitted to a private organization that specializes in the interpretation of foreign educational credentials and such education must have been deemed at least equivalent to that gained in conventional U.S. programs.

Completion of appropriate training such as in-service training programs, on the job training, training acquired while in the Armed Forces, government sponsored developmental training programs, and/or training under physicians certified in the functional area will be allowed on a month-for-month basis through the GS-5 level.

**PART II
APPENDIX G27**

Specialized developmental experience obtained under supervision of appropriately certified individuals may be credited at higher levels and is addressed in individual appendices.

d. Basic Developmental Levels**(1) GS-4**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the position to be filled. Six months of this experience may have been in medically related fields such as nursing assistant, practical nursing, or similar fields. The remaining six months must have been in operating diagnostic and therapeutic equipment covered by this occupation. Experience gained in the operation of equipment for animal diagnosis or treatment may be credited at this level. In addition, the candidate must demonstrate the following KSAs:

OR,

1. **Education.** Successful completion of two years of education above high school or an associate's degree with a major field of study directly related to the medical instrument technician occupation.

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of basic medical terminology.
2. Ability to learn the components, operating characteristics, and settings of the equipment to be used.
3. Ability to learn typical patient reactions to the basic procedures involved and ability to recognize signs of distress.
4. Ability to learn the standard positions for the procedure being conducted.
5. Ability to communicate orally and in writing.

(c) **Assignments.** At this level assignments are trainee in nature. The medical instrument technician trainee is performing limited routine assignments of a developmental nature under close supervision.

(2) GS-5

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the position to be filled. This would be experience in operating equipment related to the particular specialization for which application is made or in related functional areas. Experience gained in the operation of equipment for animal diagnosis or treatment may be credited through this grade level. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Education.** Successful completion of a bachelor's degree in a major field of study appropriate to medical instrument technician functions.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of standard medical terminology to interpret physician orders or instructions.
2. Knowledge of common physical disabilities and ability to position patients for the examination or treatment.
3. Ability to learn the normal and abnormal results for routine procedures to recognize and report obvious abnormalities.
4. Ability to operate the equipment to administer routine/standard diagnostic treatment or procedures.
5. Ability to perform standard operator maintenance on the equipment including the ability to disassemble, clean, reassemble, and calibrate the machine.

(d) **Assignment.** Medical Instrument Technicians (Trainee) at this level operate and monitor commonly used equipment performing routine procedures under normal supervision. The technician functions somewhat independently in carrying out these standardized procedures of limited complexity. Deviations from regular procedures, unanticipated problems, and unfamiliar situations are referred to the supervisor for a decision or help. Some assignments at this level also include developmental duties involving more complex procedures designed to prepare the technician for promotion to higher grades in a functional area. Such duties would be performed under closer supervision.

e. **Non-Supervisory positions at GS-6 and above.** For medical instrument technician positions with functional specialty titles, see the appropriate appendix for creditable experience, KSAs, and assignment definitions.

f. **Supervisory Medical Instrument Technician.** Supervisory positions in single specialties will be addressed in the applicable appendix, for example supervisory medical instrument technician (cardiac catheterization).

Typically, assignments for supervisory positions will be one grade (first line supervisor) or two grade (second line supervisor) levels above the full performance level of the employees supervised. The full performance levels are clearly identified in the separate appendices.

Supervisory medical instrument technician positions having oversight for two or more functional specialties will have "Multiple Function" as the parenthetical title. Grade levels for these positions should be determined by the full performance level of the positions supervised and other program management responsibilities. Individual appendices indicate the full performance level of identified specialties. Levels and complexity of supervisory positions are described below.

**PART II
APPENDIX G27****(1) First Level Supervisor**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. This experience must demonstrate possession of the knowledge required in order to provide medical instrument technician services in the functional specialties supervised. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of the more complex examination and treatment procedures and techniques.
- *2. Ability to manage and supervise employees in two or more functional specialties.
- *3. Knowledge of Joint Commission on Accreditation of Healthcare Organizations (JCAHO) and other regulatory requirements.
4. Ability to communicate effectively and professionally with employees at varying grade levels.
- *5. Ability to provide, or provide for, staff development and training.

(c) **Certification.** At this level, it is highly desirable that supervisors possess certification in one or more appropriate functional areas.

(d) **Assignment.** Typically these positions are established one grade above the full performance level of the technicians supervised. Individuals in this assignment assume full administrative and professional responsibility for planning and directing the work of subordinate technicians. Typically these duties include assigning and evaluating the work of subordinate staff; providing Medical Instrument Technician services in more complex cases; reviewing and making recommendations regarding new and emerging procedures; providing instruction and training to new staff; interviewing candidates for positions; recommending selections, advancements, promotions; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs. 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.

(2) Higher Level Supervisor

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. This would be specialized experience as a first level supervisor which demonstrates possession of the knowledge required to provide medical instrument technician services in the functional specialties supervised as well as supervisory knowledge, skills, and abilities. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) Demonstrated Knowledge, Skills, and Abilities

1. Advanced knowledge of complex and non-standard treatment and examination procedures and techniques.

*2. Ability to plan and assist in the establishment of a completely integrated treatment and examination program.

*3. Ability to evaluate new products and equipment and make recommendations concerning developments which would improve operations.

*4. Ability to manage the fiscal matters of the functions supervised (which would include fund controls, contracts, and equipment expenditures), forecast resource and equipment needs, and administer the allocated budget.

*5. Knowledge of and ability to provide the full range of supervisory duties which would include responsibility for assignment of work to be performed; performance evaluation; selection of staff; and recommendation of awards, advancements, and, when appropriate, disciplinary actions.

(c) **Certification.** At this level, it is highly desirable that supervisors possess certification in two or more functional specialties. Participation in recognized professional organizations as a Board examiner, in the development of curricula for training, or testing for the Board is evidence of competence.

(d) **Assignment.** Individuals at this level plan and direct programs at affiliated medical centers and their satellite outpatient clinics and have full supervisory responsibility for a large staff of non-supervisory personnel and at least one subordinate team leader or supervisor. Typically these duties include assigning and evaluating the work of subordinate staff resolving problems which may interfere with patient examination or treatment; providing medical instrument technician services in more complex and non-standard cases; evaluating new products and equipment and making recommendations concerning developments which would improve operations; participating as an instructor in the facility's clinical training program; making final decisions on selections based on recommendations from subordinate supervisors or leads; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs. 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.

4. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for medical instrument technicians in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements of the proposed grade.

b. There will be some positions which properly belong in this occupational series but for which there have been no authorized parenthetical specialty titles developed. Such positions may represent specialties for which there are relatively few positions or may be the result of new technologies. In either case the work of the position must be directly derived from the specialties identified in the coverage portion of this standard. Before any individual may be assigned to such a position in this series, the proposed parenthetical title must be approved by the Office of Human Resources Management & Labor Relations, Compensation and Classification Service in VA Central Office.

c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. § 7304; 7402.

Appendix A – Medical Instrument Technician (Anesthesia)

(1) **GS-6**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills and Abilities**

1. Knowledge of human anatomy and physiology (specifically cardiac and pulmonary).
2. Knowledge and application of safety and infection control processes.
3. Ability to serve as a circulating technician for supplies and to assist with documentation of hemodynamic patient data.
4. Knowledge of anesthesiology supplies and equipment appropriate to less complex anesthetic procedures, such as those found in Ambulatory Surgery.

(c) **Certification.** No certification is required; however, it is desirable that employees at this level have Basic Cardiac Life Support (BCLS) certification.

(d) **Assignment.** The anesthesia technician at this level aids anesthesiologists and nurse anesthetists in less-complex anesthetic procedures such as regional anesthesia (epidural and spinal), laryngeal mask anesthesia, and monitored anesthesia care under close supervision. Technicians will exercise minimal independent judgment in anesthesia technology duties.

(2) **GS-7**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills and Abilities**

1. Knowledge of the fundamentals of standard equipment operation, calibration and function.
2. Knowledge of correct use of non-invasive patient monitoring equipment specific to anesthesiology.
3. Ability to appropriately interact with patients during anesthetic procedures.
4. Knowledge of anesthesiology supplies and equipment appropriate to routine anesthetic procedures, such as those found in typical inpatient settings.

(c) **Certification.** No certification is required; however, it is desirable that employees at this level have Basic Cardiac Life Support (BCLS) certification.

(d) **Assignment.** The anesthesia technician at this level assists anesthesiologists and nurse anesthetists in routine anesthetic procedures under general supervision. The technician will connect and operate non-invasive hemodynamic monitoring equipment, blood and fluid warmers (e.g., Hot Line and Ranger) and patient warming devices (e.g., Bair Hugger). The technician will exercise moderate independent judgment in anesthesia technology duties.

(3) **GS-8**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills and Abilities**

1. Knowledge of the correct use of invasive patient monitoring equipment specific to anesthesiology.
2. Knowledge of basic electrocardiography (EKG).
3. Skill and ability to troubleshoot equipment, often while the patient is anesthetized.
4. Skill and ability to maintain sterility during procedures.
5. Knowledge and understanding of arterial pressure line wave forms including the ability to recognize and distinguish normal from abnormal, artifact from abnormality, and forewarn the physician or anesthetist of an impending life-threatening situation.
6. Knowledge of anesthesiology supplies, medications, and equipment appropriate to more difficult anesthetic procedures such as those found in inpatient settings with more acutely ill patients.

(c) **Certification.** No certification is required; however, it is desirable that employees at this level have Basic Cardiac Life Support (BCLS) certification.

(d) **Assignment.** This represents the full performance level. The anesthesia technician at this level assists anesthesiologists and nurse anesthetists in difficult anesthetic procedures under minimal supervision. The technician will connect and operate invasive hemodynamic monitoring equipment (e.g., arterial pressure monitors), anesthesia machines, ventilators, intubation bronchoscopes, and ultrasonic scanning devices. Technicians prepare and administer medications as directed by the attending physician. They mentor and train lower graded technicians, nurses, medical students, and anesthesia residents on anesthesia technology procedures and assist the supervisor/manager with quality control and performance improvement activities. The technician will exercise a high degree of independent judgment in anesthesia technology duties.

(4) **GS-9.** In addition to the core competencies defined at the GS-8 full performance level, positions at this level may be lead, supervisory, or non-supervisory with specialized advanced knowledge and duties.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. This would include specialized experience as an anesthesia technician which demonstrates possession of the knowledge,

skills, and abilities required to provide all aspects of anesthesia technician services including specialized duties. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1 through 6 are appropriate for all positions at this level. KSAs 7 and 8 are to be used in accordance with their appropriateness for the specific assignment.

1. Knowledge and comprehensive understanding of laboratory testing procedures to include maintenance, calibration, and quality control procedures. This includes the ability to perform these lab tests accurately and correctly.

2. Advanced knowledge of electronics and anesthesia equipment with skill in repairing and maintaining this equipment and repairing complex problems.

*3. Comprehensive knowledge of central venous and pulmonary artery (Swan-Ganz) catheterization procedures including measuring cardiac outputs and intra-aortic balloon counterpulsation procedures (i.e., balloon pump).

4. Knowledge and ability to assist with airway management techniques.

*5. Knowledge of JCAHO and other regulatory requirements.

6. Ability to communicate effectively and professionally with employees at varying grade levels.

*7. Ability to manage and supervise employees.

*8. Ability to provide, or provide for, staff development and training.

(c) **Certification.** Anesthesia technician certification through the American Society of Anesthesia Technologists and Technicians (ASATT) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level.

(d) **Assignments.** 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.

1. Special Assignments. Perioperative programs at some facilities require that anesthesia technicians perform duties that exceed the full performance level. The anesthesia technician at this level performs difficult and responsible anesthesia technology duties with considerable latitude for the exercise of independent judgment. The technician may perform clinical laboratory tests for the unit (i.e., blood gas, activated clotting time and glucose) or perform more difficult equipment repairs. The technician may also participate in large-vessel cannulations (with subsequent monitoring) characteristic of open-heart, transplant and major vascular surgeries. These assignments are expected to be relatively few in number and must represent substantial additional responsibility over the full performance level.

2. Lead Anesthesia Technician. There may be some perioperative programs that do not need a technician functioning at the full supervisory level. However, daily guidance of the anesthesia technicians

may still be required and can be accomplished through a lead technician. Typically, the lead technician will only have the responsibility of seeing that the work flows smoothly, assuring coverage if needed and assigning work. Authority to approve leave, take disciplinary action, etc. will only be assigned to full supervisory positions.

3. Supervisory Anesthesia Technician. Individuals in this assignment assume full administrative and professional responsibility for planning and directing the work of subordinate technicians. Typically these duties include assigning and evaluating the work of subordinate staff; providing anesthesia technician services in more complex cases; reviewing and making recommendations regarding new and emerging procedures; providing instruction and training to new staff; interviewing candidates for positions; recommending selections, advancements, promotions; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

(5) **GS-10.** In addition to the core competencies defined at the GS-9 level, positions at this grade may be supervisory or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Knowledge of the more complex procedures and techniques in the practice of anesthesiology such as extracorporeal blood salvage, washing and return to patient (also known as autotransfusion or cell saving) and arterial and/or venous cannulation for the establishment of arterial pressure monitoring or intravenous fluid/medication delivery.

*2. Ability to plan and assist in the establishment of a completely integrated treatment and procedure program.

*3. Ability to evaluate new products and equipment and make recommendations concerning developments which would improve operations.

*4. Ability to manage the fiscal matters of the functions supervised (which would include fund controls, contracts and equipment expenditures), forecast resource and equipment needs and administer the allocated budget.

*5. Knowledge of and ability to provide the full range of supervisory duties which would include responsibility for assignment of work to be performed; performance evaluation; selection of staff; and recommendation of awards, advancements and, when appropriate, disciplinary actions.

(c) **Certification.** Anesthesia technician certification through the American Society of Anesthesia Technologists and Technicians (ASATT) is highly desired. Basic Cardiac Life Support (BCLS) and

Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level. Participation in recognized professional organizations as a Board examiner, in the development of curricula for training, or testing for the Board is evidence of competence.

(d) **Assignments.** In addition to the core competencies defined at the GS-9 level, positions at this level may be supervisory or non-supervisory with specialized advanced knowledge and duties. 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.

1. **Special Assignments.** Perioperative programs at some facilities require that anesthesia technicians perform duties that exceed the full performance level. The anesthesia technician at this level performs highly difficult and responsible anesthesia technology duties with considerable latitude for the exercise of independent judgment. The anesthesia technician may perform autotransfusion services to ensure that the patient is receiving the safest possible blood transfusion (his/her own blood) and that the regional blood bank supply is not unnecessarily depleted. Additionally, the anesthesia technician may be an integral part of the Anesthesia Care Team and prepare the patients for surgery by establishing arterial or venous access for the anesthesiologists and nurse anesthetists.

2. **Supervisory Anesthesiology Technician.** Individuals at this level plan and direct programs at affiliated medical centers and their satellite outpatient clinics and have full supervisory responsibility for a large staff of non-supervisory personnel and at least one subordinate team leader or supervisor. Typically these duties include assigning and evaluating the work of subordinate staff; resolving problems which may interfere with patient examination or treatment; providing anesthesia technician services in more complex and non-standard cases; evaluating new products and equipment and making recommendations concerning developments which would improve operations; participating as an instructor in the facility's clinical training program; making final decisions on selections based on recommendations from subordinate supervisors or leads; evaluation performance; taking disciplinary action when necessary; and identifying educational or training needs.

Appendix B – Medical Instrument (Cardiac Catheterization)

(1) **GS-6**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of cardiac anatomy, physiology, and basic electrocardiography.
2. Knowledge of sterile techniques, catheterization laboratory supplies, and equipment used in the procedures.
3. Ability to circulate, assist, monitor, and document hemodynamics and electrocardiograms during the procedure.
4. Knowledge of and ability to prepare intra-aortic balloon catheters.

(c) **Certification.** Basic Cardiac Life Support (BCLS) certification is desirable.

(d) **Assignment.** The cardiac catheterization technician at this level aids physicians in aspects of cardiac catheterization and related invasive procedures such as coronary angioplasty, pulmonary angioplasty, and intra-aortic balloon insertion. The technician must be able to recognize cardiac arrhythmias and take appropriate action.

(2) **GS-7**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to assist with insertion of temporary transvenous pacemaker catheters.
2. Ability to maintain intra-aortic balloon pump equipment during procedures.
3. Ability to complete individual cases by pulling sheaths and holding pressure to obtain hemostasis.
4. Ability to assist with closure devices.
5. Ability to appropriately educate patients and patient families regarding procedures and post-catheterization care.

(c) **Certification.** Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are desirable.

(d) **Assignment.** Cardiac catheterization technicians at this level aid physicians in all aspects of standard cardiac catheterization and related invasive procedures such as coronary angioplasty, pulmonary angioplasty, and intra-aortic balloon insertion. They select, set up, and calibrate surgical instruments, catheters, radiographic contrast injectors, and radiographic imaging devices. They prepare cardiac medication for administration by the physician and must be able to recognize cardiac arrhythmias and take appropriate action.

(3) **GS-8**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics of the positions to be filled. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to scrub, circulate, and monitor advanced procedures (including electrophysiological) to include rotoblation, intravascular ultrasound, RADI or wave-wire, angiojet, filter wires, myocardial biopsies EPS, permanent pacemaker insertions, AICD insertions, and biventricular pacemaker insertion.

2. Advanced knowledge of equipment, medications, and supplies used in the Cardiac Catheterization Laboratory and the ability to set-up, calibrate, operate, and troubleshoot this equipment.

3. Knowledge and understanding of wave forms from the great vessels and all chambers of the heart including the ability to recognize and distinguish normal from abnormal, artifact from abnormality, and forewarn the physician of an impending life-threatening situation.

4. Knowledge of quality control and performance improvement indicators for the Cardiac Catheterization Laboratory and ability to prepare and analyze quality control of test results.

(c) **Certification.** Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are desirable.

(d) **Assignment.** This represents the full performance level. Cardiac catheterization technicians at this level function as full members of the Cardiac Catheterization Laboratory Team. They scrub, circulate, operate equipment, etc., on the most complex examination and treatment procedures including procedures such as endocardial biopsy, radio frequency ablation procedures, and intra-aortic balloon pump therapy for very critical patients. They prepare and administer cardiac medications as directed by the attending physician. They mentor and train lower graded technicians, nurses, nursing students, and cardiopulmonary technology students on cardiac catheterization laboratory procedures and assist the supervisor/manager with quality control and performance improvement activities.

(4) **GS-9.** In addition to the core competencies defined at the GS-8 full performance level, positions at this grade may be lead, supervisory, or non-supervisory with specialized advanced knowledge and assignments.

VA HANDBOOK 5005/15
PART II
APPENDIX G27

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. This would be experience which demonstrates possession of the knowledge required in order to provide all aspects of cardiac catheterization technician services. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Knowledge of the more complex examination and treatment procedures and techniques in order to provide training and supervision in these procedures, to evaluate and initiate performance improvement projects, and to write policies, procedures, and protocols, that pertain to the Cardiac Catheterization Laboratory.

*2. Knowledge of JCAHO and other regulatory requirements.

3. Ability to communicate effectively and professionally with employees at varying grade levels.

*4. Ability to manage and supervise employees.

*5. Ability to provide, or provide for, staff development and training.

(c) **Certification.** Registration by Cardiovascular Credentialing International (CCI) as a registered Cardiovascular Invasive Specialist (RCIS) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level.

(d) **Assignments.** 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.

1. **Special Assignments.** Non-supervisory medical instrument technician (cardiac catheterization) may have assignments that because of their nature substantially exceed the full performance level. The Professional Standards Board will review proposed non-supervisory special assignments for the GS-9 level and make a determination regarding their appropriateness. These assignments are expected to be relatively few in number and must represent substantial additional responsibility over the full performance level.

2. **Lead Medical Instrument Technician (Cardiac Catheterization).** In certain programs, either because of their size and scope or because of a lack of specific supervisory positions, lead positions may be appropriate.

3. **Supervisory Cardiac Catheterization Technician.** Individuals in this assignment assume full administrative and professional responsibility for planning and directing the work of subordinate technicians. Typically these duties include assigning and evaluating the work of subordinate staff; providing cardiac catheterization technician services in more complex cases; reviewing and making recommendations regarding new and emerging procedures; providing instruction and training to new staff; interviewing candidates for positions; recommending selections, advancements, promotions; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

(5) **GS-10.** In addition to the core competencies defined at the GS-9 level, positions at this grade may be supervisory or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. This would be experience that demonstrates possession of the knowledge required to provide the most complex cardiac catheterization technician services and/or supervisory knowledge, skills, and abilities. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Advanced knowledge of complex and non-standard treatment and examination procedures and techniques.

*2. Ability to plan and assist in the establishment of a completely integrated treatment and examination program.

*3. Ability to evaluate new products and equipment and make recommendations concerning developments which would improve operations.

*4. Ability to manage the fiscal matters of the functions supervised (which would include fund controls, contracts, and equipment expenditures), forecast resource and equipment needs, and administer the allocated budget.

*5. Knowledge of and ability to provide the full range of supervisory duties which would include responsibility for assignment of work to be performed; performance evaluation; selection of staff; and recommendation of awards, advancements, and, when appropriate, disciplinary actions.

(c) **Certification.** Registration by Cardiovascular Credentialing International (CCI) as a registered Cardiovascular Invasive Specialist (RCIS) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level.

(d) **Assignments.** 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.

1. **Special Assignments.** There may be a rare non-supervisory position supporting this grade level. Such a position would typically include maintaining all data and research protocols for cardiac procedures and investigations as well as writing policies, procedures, and protocols for a cardiac catheterization laboratory.

2. **Supervisory Cardiac Catheterization Technician.** Individuals at this level plan and direct programs at affiliated medical centers and satellite outpatient clinics and have full supervisory responsibility for a large staff of non-supervisory personnel and at least one subordinate team leader or supervisor. Typically these duties include assigning and evaluating the work of subordinate staff resolving problems which may interfere with patient examination or treatment; providing cardiac catheterization technician services in more complex

and non-standard cases; evaluating new products and equipment and making recommendations concerning developments which would improve operations; participating as an instructor in the facility's clinical training program; making final decisions on selections based on recommendations from subordinate supervisors or leads; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

Appendix C – Medical Instrument Technician (Diagnostic Ultrasound)

NOTE: Positions should be assigned to the DRT, GS-647 series, when both ultrasound and other modalities which require the delivery of ionizing radiation are performed. Positions in which ultrasound duties are performed exclusively (no other modalities are performed), should be assigned to the Medical Instrument Technician, GS-649 series, since ultrasound duties solely do not require the delivery of ionizing radiation.

(1) GS-6

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of medical terminology and human anatomy in order to receive and interpret physician requests for routine, standardized ultrasonography procedures.
2. Knowledge of tissue harmonics and soundwave propagation within the body to adjust TGC (Time Gain Compensation) for optimal image quality.
3. Knowledge of the physics of velocity, frequency of soundwaves, and their physical properties.
4. Ability to set up and adjust the ultrasound equipment to meet the conditions of the examination and the patient and to operate the equipment for standardized, routine procedures.
5. Ability to interact with patients explaining procedures and positioning the patient for the procedure.

(c) **Certification.** Basic Cardiac Life Support (BCLS) certification is desirable.

(d) **Assignment.** At this level, medical instrument technicians (diagnostic ultrasound) perform examinations which are routine and standardized in nature. They position the patient as needed for the best test results, set up and adjust the ultrasound equipment to meet the condition of the examination and patient, move and adjust depths and types of scan in accordance with procedures, perform operator preventive maintenance and care of equipment, and assist higher graded technicians in performing more complicated examinations.

(2) GS-7

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This would be experience which provided the individual with the knowledge, skills, and abilities to independently conduct difficult but standardized diagnostic ultrasonography examinations. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to set up and adjust the ultrasound equipment to meet the conditions of the examination and the patient and to operate the equipment for more complex, but standardized procedures.
2. Knowledge of zoom, expansion, prospectus, color Doppler, and pulsed echo Doppler.
3. Knowledge of the digital transmission of images.
4. Ability to alter standard, but complex procedures and protocols to meet patient needs and physical limitations.

(c) **Certification.** Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are desirable.

(d) **Experience.** At this level the medical instrument technician (diagnostic ultrasound) performs complex, standardized procedures independently. They have the knowledge to alter procedures, equipment settings, transducers used, etc., to accommodate patient needs and still produce a quality image for diagnostic purposes. They will also be required to assist with the performance of more complicated procedures and non-standardized procedures in a developmental capacity.

(3) **GS-8**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This would be experience which provided the overall knowledge, skills, and abilities to conduct diagnostic ultrasound examinations in complex and unusual cases. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to perform diagnostic ultrasound examination on multiple areas of the body, including, but not limited to, the abdomen, pelvis, transvaginal, chest, small parts, thyroid, breast, and scrotum.
2. Ability to perform vascular studies such as vertebral, renal artery, aortic aneurysm, portal-systemic shunts, etc.
3. Ability to assist radiologists with biopsy procedures determining the location, depth, and required needle angle for the lesion to be sampled.
4. Ability to assist in surgical procedures and fluid aspirations.

(c) **Certification.** Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are desirable.

(d) **Assignment.** This represents the full performance level for medical instrument technician (diagnostic ultrasound). At this level the technician is required to perform a full range of procedures including special

complicated examinations for which there are no standard instructions or procedures. They perform independent portable ultrasound examinations in the intensive care units, emergency room, surgery, and throughout the Medical Center when required. They also work independently on evenings, nights, and weekend tours of duty as scheduled and/or when on call.

(4) **GS-9.** In addition to the core competencies defined at the GS-8 full performance level, positions at this grade may be lead, supervisory, or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. This would be specialized experience which demonstrates possession of the knowledge required in order to provide all aspects of diagnostic ultrasonography services. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Knowledge of the more complex examination and treatment procedures and techniques in order to provide training and supervision in these procedures, to evaluate and initiate performance improvement projects, and to write policies, procedures, and protocols that pertain to diagnostic ultrasonography.

*2. Knowledge of JCAHO and other regulatory requirements.

3. Ability to communicate effectively and professionally with employees at varying grade levels.

*4. Ability to manage and supervise employees.

*5. Ability to provide, or provide for, staff development and training.

(c) **Certification.** Registration by Cardiovascular Credentialing International (CCI) or by the American Registry of Diagnostic Medical Sonographers (ARDMS) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable.

(d) **Assignments.** 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.

1. **Special Assignments.** Non-supervisory diagnostic ultrasound technicians may have assignments that because of their nature substantially exceed the full performance level. The Professional Standards Board will review proposed non-supervisory special assignments for the GS-9 level and make a determination regarding their appropriateness. These assignments are expected to be relatively few in number and must represent substantial additional responsibility over the full performance level.

2. **Lead Diagnostic Ultrasound Technician.** In certain programs, either because of their size and scope or because of a lack of specific supervisory positions, lead positions may be appropriate.

3. Supervisory Diagnostic Ultrasound Technician. Individuals in this assignment assume full administrative and professional responsibility for planning and directing the work of subordinate technicians. Typically these duties include assigning and evaluating the work of subordinate staff; providing diagnostic ultrasound technician services in more complex cases; reviewing and making recommendations regarding new and emerging procedures; providing instruction and training to new staff; interviewing candidates for positions; recommending selections, advancements, promotions; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

(5) **GS-10.** In addition to the core competencies defined at the GS-9 level, positions at this grade may be supervisory or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Advanced knowledge of complex and non-standard treatment and examination procedures and techniques.

*2. Ability to plan and assist in the establishment of a completely integrated treatment and examination program.

*3. Ability to evaluate new products and equipment and make recommendations concerning developments which would improve operations.

*4. Ability to manage the fiscal matters of the functions supervised (which would include fund controls, contracts, and equipment expenditures), forecast resource and equipment needs, and administer the allocated budget.

*5. Knowledge of and ability to provide the full range of supervisory duties which would include responsibility for assignment of work to be performed; performance evaluation; selection of staff; and recommendation of awards, advancements, and, when appropriate, disciplinary actions.

(c) **Certification.** Registration by Cardiovascular Credentialing International (CCI) or by the American Registry of Diagnostic Medical Sonographers (ARDMS) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable.

(d) **Assignments.** 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.

1. **Special Assignments.** There may be a rare non-supervisory position supporting this grade level. Such a position would typically include knowledge of standards of medical practice in applicable medico-legal responsibilities in diagnostic ultrasound procedures; developing protocols and clinical research projects;

developing and updating technical policy and procedure manuals; as well as teaching the correct methodology of diagnostic ultrasound procedures, theory of operations, and theory of interpretation of results to trainees.

2. Supervisory Diagnostic Ultrasound Technician. Individuals at this level plan and direct programs at affiliated medical centers and their satellite outpatient clinics and have full supervisory responsibility for a large staff of non-supervisory personnel and at least one subordinate team leader or supervisor. Typically these duties include assigning and evaluating the work of subordinate staff resolving problems which may interfere with patient examination or treatment; providing diagnostic ultrasonography technician services in more complex and non-standard cases; evaluating new products and equipment and making recommendations concerning developments which would improve operations; participating as an instructor in the facility's clinical training program; making final decisions on selections based on recommendations from subordinate supervisors or leads; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

Appendix D – Medical Instrument Technician (Echocardiography)

(1) **GS-6**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of the anatomy and physiology of the heart and great vessels.
2. Knowledge of cardiac arrhythmias and their relationship to hemodynamic conditions of the cardiac cycle.
3. Knowledge of basic cardiac ultrasound physics and the acoustic mechanisms by which high quality cardiac images are obtained.
4. Ability to set up and adjust the ultrasound equipment to meet the conditions of the examination and the patient and to operate the equipment for standardized, routine procedures.
5. Ability to interact with patients explaining procedures and positioning the patient for the procedure.

(c) **Certification.** Basic Cardiac Life Support (BCLS) certification is desirable.

(d) **Assignment.** Echocardiography technician assignments at this level involve performing routine, standardized cardiac ultrasound examinations under the supervision of a fully qualified cardiac sonographer. The work involves generating adequate gray scale images to define cardiac borders and learning to perform Doppler integration of cardiac valves for determination of flow velocities.

(2) **GS-7**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This would be experience which provided the individual with the knowledge, skills, and abilities to independently conduct difficult but standardized echocardiographic examinations. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to scan transthoracic echocardiograms in all views with colorflow and some Doppler.
2. Ability to conduct cardiac testing to determine the severity and variety of cardiac problems, i.e., valvular dysfunction, myocardial wall kinesia, effusions, endocardial lesions, etc.
3. Knowledge of the set-up for transesophageal echocardiograms.

4. Ability to set up and adjust the ultrasound equipment to meet the conditions of the examination and the patient and to operate the equipment for more complex, but standardized procedures.

(c) **Certification.** Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are desirable.

(d) **Assignment.** At this level, medical instrument technicians (echocardiography) perform a range of standard, but complex, echocardiographic examinations with responsibility for calibrating all instruments prior to the procedure. They are expected to keep an accurate record of tests, daily logs, and videotapes. They maintain index logs.

(3) **GS-8**

(a) Experience. At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This would be experience which provided the overall knowledge, skills, and abilities to conduct diagnostic echocardiography examinations in complex and unusual cases. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills and Abilities**

1. Ability to produce diagnostic quality images and Doppler frequency shift recordings using M-mode, two-dimensional, pulsed and continuous wave Doppler spectral display, and colorflow Doppler imaging.

2. Knowledge of normal echocardiographic findings and deviations produced by a wide variety of cardiovascular diseases.

3. Ability to perform complex procedures such as cardiac studies of the four chambers of the heart and valves using sector scanning techniques to detect stenotic and incompetent valves, chamber enlargement, and pericardial effusion and cardiovascular studies deriving pressure gradients across obstructed valves, etc.

4. Ability to perform complementary ultrasonic examinations (including noninvasive) transthoracic, Bubble studies and contrast echocardiography, (invasive) stress echocardiography, and transesophageal echocardiography.

5. Ability to adapt transducer positioning, instrument controls, and examination techniques to the individual patient being studied and the problem being evaluated including recognizing pertinent abnormalities and documenting abnormal findings.

(c) **Certification.** Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are desirable.

(d) **Assignment.** This represents the full performance level. Echocardiography technicians at this level identify and record anomalies indicative of disease, injury, or other medically significant condition from ultrasound imaging and simultaneous recordings of the Doppler. They incorporate the causes and results of a variety of symptoms and conditions into a plan of ultrasonic diagnostic examination. They change and develop sounding techniques to accommodate such variables as limited patient mobility, variation in

physical condition or dimension of the patient, presence of prosthesis or foreign objects, and ultrasonic response of different body parts. They produce diagnostic quality images and Doppler frequency recordings using M-mode, two-dimensional, and Doppler ultrasound.

(4) **GS-9.** In addition to the core competencies defined at the GS-8 full performance level, positions at this grade may be lead, supervisory, or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. This would be experience which demonstrates possession of the knowledge required in order to provide all aspects of echocardiography services. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Knowledge of the more complex examination and treatment procedures and techniques in order to provide training and supervision in these procedures, to evaluate and initiate performance improvement projects, and to write policies, procedures, and protocols, that pertain to Echocardiography.

*2. Knowledge of JCAHO and other regulatory requirements.

3. Ability to communicate effectively and professionally with employees at varying grade levels.

*4. Ability to manage and supervise employees.

*5. Ability to provide, or provide for, staff development and training.

(c) **Certification.** Registration by Cardiovascular Credentialing International (CCI) as a Registered Cardiac Sonographer (RCS) or by the American Registry of Diagnostic Medical Sonographers (ARDMS) as a Registered Diagnostic Cardiac Sonographer (RDCS) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable.

(d) **Assignments.** 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.

1. **Special Assignments.** Non-supervisory echocardiography technicians may have assignments that because of their nature substantially exceed the full performance level. The Professional Standards Board will review proposed non-supervisory special assignments for the GS-9 level and make a determination regarding their appropriateness. These assignments are expected to be relatively few in number and must represent substantial additional responsibility over the full performance level.

2. **Lead Echocardiography Technician.** In certain programs, either because of their size and scope or because of a lack of specific supervisory positions, lead positions may be appropriate.

3. Supervisory Echocardiography Technician. Individuals in this assignment assume full administrative and professional responsibility for planning and directing the work of subordinate technicians. Typically these duties include assigning and evaluating the work of subordinate staff; providing Echocardiography Technician services in more complex cases; reviewing and making recommendations regarding new and emerging procedures; providing instruction and training to new staff; interviewing candidates for positions; recommending selections, advancements, promotions; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

(5) **GS-10.** In addition to the core competencies defined at the GS-9 level, positions at this grade may be supervisory or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Advanced knowledge of complex and non-standard treatment and examination procedures and techniques.

*2. Ability to plan and assist in the establishment of a completely integrated treatment and examination program.

*3. Ability to evaluate new products and equipment and make recommendations concerning developments which would improve operations.

*4. Ability to manage the fiscal matters of the functions supervised (which would include fund controls, contracts, and equipment expenditures), forecast resource and equipment needs, and administer the allocated budget.

*5. Knowledge of and ability to provide the full range of supervisory duties which would include responsibility for assignment of work to be performed; performance evaluation; selection of staff; and recommendation of awards, advancements, and, when appropriate, disciplinary actions.

(c) **Certification.** Registration by Cardiovascular Credentialing International (CCI) as a Registered Cardiac Sonographer (RCS) or by the American Registry of Diagnostic Medical Sonographers (ARDMS) as a Registered Diagnostic Cardiac Sonographer (RDMS) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable.

(d) **Assignments.** 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.

1. Special Assignments. There may be a rare non-supervisory position supporting this grade level. Such a position would typically include independently carrying out the most complex laboratory procedures such

PART II

APPENDIX G27

as real-time 3D cardiac ultrasounds utilizing on-line and off line computer enhancement and reconstruction technology and 3D reconstruction using off-line computers for rendering real-time 3D images to specified parameters as well as teaching the correct methodology of echocardiography procedures, theory of operations, and theory of interpretation of results to trainees.

2. Supervisory Echocardiography Technician. Individuals at this level plan and direct programs at affiliated medical centers and satellite outpatient clinics and have full supervisory responsibility for a large staff of non-supervisory personnel and at least one subordinate team leader or supervisor. Typically these duties include assigning and evaluating the work of subordinate staff resolving problems which may interfere with patient examination or treatment; providing echocardiography technician services in more complex and non-standard cases; evaluating new products and equipment and making recommendations concerning developments which would improve operations; participating as an instructor in the facility's clinical training program; making final decisions on selections based on recommendations from subordinate supervisors or leads; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

Appendix E – Electrocardiograph Technician (EKG)

(1) **GS-6**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills and Abilities**

1. Ability to recognize special patient needs such as disabilities, impaired mobility, and complicating medical conditions in order to prepare and position the patient for the prescribed procedure.

2. Knowledge of the specialized equipment and accessories appropriate to Holter monitoring and ability to perform such tests.

3. Knowledge of universal precautions and sterilization techniques and ability to follow CDC guidelines in cleaning equipment.

4. Ability to monitor the patient for adverse reactions and take appropriate action.

5. Ability to operate the equipment to perform standard and routine highly specialized procedures including exercise stress testing.

(c) **Certification.** No certification is required; however, it is desirable that employees at this level have BCLS (Basic Cardiac Life Support) certification.

(d) **Assignment.** Medical instrument technicians (EKG) at this level receive and interpret physician's requests for diagnostic procedures and/or treatments; explain the procedure to the patient to secure the patient's confidence and cooperation; document the patient's record; independently perform standardized testing monitoring the patient for adverse reactions; and operate, calibrate, and clean and/or sterilize commonly used equipment. Assignments at this level require knowledge of standard medical terminology as well as common diseases and their specific affects.

(2) **GS-7**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This would be experience which provided knowledge of the equipment, standard tests and procedures, and typical readings including arrhythmias and abnormalities. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of typical patient reactions and signs of distress including the ability to recognize, report and treat potentially lethal arrhythmias.

2. Knowledge of common equipment settings and standardized procedures plus knowledge of common errors and corrective measures.

3. Ability to modify procedures/positions to obtain the correct results with patients with complicating conditions such as amputations, Parkinson's disease, structural defects, and scar tissue.

4. Ability to act as a mentor or preceptor to lower graded technicians.

5. Ability to conduct in-service training on the EKG equipment and related instrumentation.

(c) **Certification.** No certification is required; however, it is desirable that employees at this level have BCLS (Basic Cardiac Life Support) and ACLS (Advanced Cardiac Life Support) certifications.

(d) **Assignment.** This represents the full performance level. Medical instrument technicians (EKG) at this level operate and monitor electrocardiographic equipment to perform specialized examinations and studies involving exercise stress testing, ambulatory monitoring of arrhythmias, and indirect carotid pulse tracings on chronic patients. They monitor tracings to identify arrhythmias and when gross abnormalities appear, when to repeat certain procedures, when to stop test procedures, and when to get the immediate attention of a physician. They evaluate test results to determine appropriate machine adjustments and use alternative techniques and procedures when established procedures do not accomplish acceptable results. This includes adapting equipment and accessories to yield the best results during the examination. They edit and select an appropriate sample portion of the tracing for further interpretation by the physician.

(3) **GS-8.** In addition to the core competencies defined at the GS-7 full performance level, positions at this grade may be lead, supervisory, or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. This would be experience which provided knowledge of advanced specialized procedures, the pharmacology related to this occupation, and knowledge of related acute disorders and diseases and their effects on organs and methods of treatment. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, 3, and 4 are appropriate for all positions at this level. KSAs 5 and 6 are to be used in accordance with their appropriateness for the specific assignment.

1. Knowledge of pharmacology related to specialized procedures.

2. Ability to provide briefings and orientations to hospital staff including physicians.

3. Knowledge of a variety of related acute disorders and diseases, their effects on organs, and methods of treatment.

4. Ability to perform more complex procedures such as SAECG (Signal Averaged ECG), Tilt table monitoring, electrophysiology monitoring, and event monitoring.

*5. Ability to provide, or provide for, staff development and training.

*6. Ability to manage and supervise employees.

(c) **Certification.** No certification is required; however, it is desirable that employees at this level have BCLS (Basic Cardiac Life Support) and ACLS (Advanced Cardiac Life Support) certifications.

(d) **Assignments.** Medical instrument technicians (EKG) at this level perform complicated examinations or treatments for which there are no standard instructions or procedures. They utilize knowledge of anatomy and physiology including an in depth understanding of the functioning of the major systems and internal organs to interpret requests and to recognize the need for additional tests or a different position. Knowledge of pharmacology including the classification and administration of drugs, patient responses, and common dosages as related to this specialty is required. The technician has the ability to perform Signal Averaged ECG, Tilt table monitoring, electrophysiology monitoring, and event monitoring. 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.

1. **Special Assignments.** Non-supervisory medical instrument technician (EKG) may have assignments that because of their nature substantially exceed the full performance level. The Professional Standards Board will review proposed non-supervisory special assignments for the GS-8 level and make a determination regarding their appropriateness. These assignments are expected to be relatively few in number and must represent substantial additional responsibility over the full performance level.

2. **Lead Medical Instrument Technician (EKG).** In certain programs, either because of their size and scope or because of a lack of specific supervisory positions, lead positions may be appropriate.

3. **Supervisory Medical Instrument Technician (EKG).** Individuals in this assignment assume full administrative and professional responsibility for planning and directing the work of subordinate technicians. Typically these duties include assigning and evaluating the work of subordinate staff; providing medical instrument technician (EKG) services in more complex cases; reviewing and making recommendations regarding new and emerging procedures; providing instruction and training to new staff; interviewing candidates for positions; recommending selections, advancements, promotions; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

(4) **GS-9.** In addition to the core competencies defined at the GS-8 level, positions at this grade may be lead, supervisory, or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Knowledge of the more complex examination and treatment procedures and techniques such as SAECG, ETT, Tilt table monitoring, electrophysiology monitoring, and event monitoring in order to provide training and supervision in these procedures, to develop analysis interpretation formats, and to receive inquiries concerning results.

*2. Knowledge of JCAHO and other regulatory requirements.

3. Ability to communicate effectively and professionally with employees at varying grade levels.

*4. Ability to provide, or provide for, staff development and training.

*5. Ability to manage and supervise employees.

(c) **Certification.** Certification by Cardiovascular Credentialing International (CCI) as a Certified Cardiographic Technician (CCT) is highly desirable at this level. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level.

(d) **Assignments.** 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.

1. **Special Assignments.** Non-supervisory medical instrument technician (EKG) may have assignments that because of their nature substantially exceed the GS-8 level. The Professional Standards Board will review proposed non-supervisory special assignments for the GS-9 level and make a determination regarding their appropriateness. These assignments are expected to be few in number and must represent substantial additional responsibility.

2. **Lead Medical Instrument Technician (EKG).** In certain programs, either because of their size and scope or because of a lack of specific supervisory positions, lead positions may be appropriate.

3. **Supervisory Medical Instrument Technician (EKG).** Individuals in this assignment assume full administrative and professional responsibility for planning and directing the work of subordinate technicians. Typically these duties include assigning and evaluating the work of subordinate staff; providing medical instrument technician (EKG) services in more complex cases; reviewing and making recommendations regarding new and emerging procedures; providing instruction and training to new staff; interviewing candidates for positions; recommending selections, advancements, promotions; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

Appendix F – Medical Instrument Technician (Electroencephalography)**(1) GS-6**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of basic medical terminology, neuroanatomy, neurophysiology, and EEG interpretation.
2. Ability to position patients for the examination or treatment including using standard alternate positions for patient with common physical disabilities.
3. Ability to operate the appropriate EEG equipment to administer routine, standardized diagnostic or treatment procedures.
4. Knowledge of normal and abnormal results to recognize and report obvious abnormalities during procedures.
5. Knowledge of universal precautions and basic sterilization methods to clean instruments to prevent the spread of infectious diseases.
6. Knowledge of EEG and peripheral equipment to conduct routine maintenance and adjustment checks.

(c) **Certification.** No certification or registration is required; however, it is desirable that employees at this level have BCLS (Basic Cardiac Life Support) certification.

(d) **Assignment.** Operates and monitors EEG equipment in the EEG Lab, intensive care units, operating room, and the patient's bedside. Performs a full range of standard, routine EEG examinations including routine awake and sleep recordings, electrocerebral silence recordings, multiple sleep latency recordings, intraoperative monitoring, electrocorticography. Performs nerve conduction studies using electromyography equipment. Prepares recordings for interpretation and performs a preliminary review and interpretation of the recordings.

(2) GS-7

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the positions to be filled. This would be experience which provided the individual with the knowledge, skills, and abilities to independently conduct difficult but standardized electroencephalography examinations. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to perform more complex electroencephalography studies such as evoked potential (visual, auditory, somatosensory) and transcranial Doppler studies.
2. Knowledge of medication effects related to electroencephalography studies and clinical situations requiring medication.
3. Knowledge of life threatening or medically emergent testing or patient situations.
4. Ability to recognize artifacts (patient or environmental) and document, eliminate, or take proper measures to monitor the artifact.

(c) **Certification.** No certification or registration is required; however, it is desirable that employees at this level have BCLS (Basic Cardiac Life Support) and ACLS (Advanced Cardiac Life Support) certifications.

(d) **Assignment.** At this level, the medical instrument technician (EEG) independently performs routine but complex procedures and has advanced knowledge in certain areas. They are able to deal with difficult or more complex patients. They are able to identify and correct most artifacts. Procedures are fully explained to the patient and family members to set them at ease. Interpretative skills are sufficient to allow identification of more serious conditions requiring rapid intervention.

(3) **GS-8**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This would be experience which provided knowledge of the more complex procedures, the pharmacology related to this occupation, and knowledge of related acute disorders and diseases and their effects on organs and methods of treatment. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to interpret testing data to evaluate critical information for surgeons and other medical staff during testing procedures.
2. Knowledge of anatomy and physiology of the nervous system and the ability to understand the relationship of EEG and evoked potential testing in detecting states of disease and health.
3. Knowledge of behavior assessment during seizure attacks in order to insure adequacy of recordings during seizure discharges.
4. Knowledge of a variety of advanced EEG equipment and peripheral equipment such as equipment for brain mapping, video EEG telemetry systems with seizure detection computers, and spike analysis software.
5. Knowledge of anticonvulsant medications and their effects on the EEG as well as other frequently used pharmaceuticals.

6. Ability to adapt neurodiagnostic devices, parameters, and procedures to complex, unusual, and often critical situations.

(c) **Certification.** No certification or registration is required; however, it is desirable that employees at this level have BCLS (Basic Cardiac Life Support) and ACLS (Advanced Cardiac Life Support) certifications.

(d) **Assignment.** This represents the full performance level. Medical instrument technicians (EEG) at this level are expected to provide independent performance of a full range of procedures. The technician consistently delivers high quality studies for the most complex and non-routine procedures in difficult or demanding environments such as research, intraoperative monitoring, or intensive care monitoring. Procedures are tailored to clinical questions to be answered and may require additional monitors, electrodes, or other devices as clinically indicated. The technician interprets study results and brings to the attention of the physician or supervisor more subtle abnormalities that may require intervention. The technician will highlight portions of recordings of clinical importance for review by the clinical neurophysiologist and will accurately describe the concurrent behavior of the patient. Positive interaction with other health care staff to inform them of the indications for testing; the value, possible outcomes, and limitations of testing; and the policies of the laboratory are expected.

(4) **GS-9.** In addition to the core competencies defined at the GS-8 full performance level, positions at this grade may be lead, supervisory, or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Knowledge of the more complex examination and treatment procedures and techniques in order to provide training and supervision in these procedures.

*2. Knowledge of JCAHO and other regulatory requirements.

3. Ability to communicate effectively and professionally with employees at varying grade levels.

*4. Ability to manage and supervise employees.

*5. Ability to provide, or provide for, staff development and training.

(c) **Certification.** Registration by the American Board of Registration of EEG, CNIM & EP Technologists (ABRET) or the American Association of Electrodiagnostic Technologists (AEET) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level.

(d) **Assignments.** 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.

1. **Special Assignments.** Non-supervisory Electroencephalography Technicians may have assignments that because of their nature substantially exceed the full performance level. The Professional Standards Board will review proposed non-supervisory special assignments for the GS-9 level and make a determination regarding their appropriateness. These assignments are expected to be relatively few in number and must represent substantial additional responsibility over the full performance level.

2. **Lead Electroencephalography Technicians.** In certain programs, either because of their size and scope or because of a lack of specific supervisory positions, lead positions may be appropriate.

3. **Supervisory Electroencephalography Technician.** Individuals in this assignment assume full administrative and professional responsibility for planning and directing the work of subordinate technicians. Typically these duties include assigning and evaluating the work of subordinate staff; providing medical instrument technician (EEG) services in more complex cases; reviewing and making recommendations regarding new and emerging procedures; providing instruction and training to new staff; interviewing candidates for positions; recommending selections, advancements, promotions; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

(5) **GS-10.** In addition to the core competencies defined at the GS-9 level, positions at this grade may be supervisory or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. This would be experience which demonstrates possession of the knowledge required to provide the most complex EEG Technician services and/or supervisory knowledge, skills, and abilities. Participation in recognized professional organizations as a Board examiner, in the development of curricula for training, or testing for the Board is evidence of competence. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Advanced knowledge of the most complex and non-standard treatment and examination procedures and techniques.

*2. Ability to plan and assist in the establishment of a completely integrated treatment and examination program.

*3. Ability to evaluate new products and equipment and make recommendations concerning developments which would improve operations.

*4. Ability to manage the fiscal matters of the functions supervised (which would include fund controls, contracts, and equipment expenditures), forecast resource and equipment needs, and administer the allocated budget.

*5. Knowledge of and ability to provide the full range of supervisory duties which would include responsibility for assignment of work to be performed; performance evaluation; selection of staff; and recommendation of awards, advancements, and, when appropriate, disciplinary actions.

(c) **Certification.** Registration by the American Board of Registration of EEG, CNIM & EP Technologists (ABRET) or the American Association of Electrodiagnostic Technologists (AEET) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level.

(d) **Assignments.** 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.

1. **Special Assignments.** There may be a rare non-supervisory position supporting this grade level. Such a position would typically include carrying out laboratory procedures independently in complex environments such as the operating room, monitoring suites, and clinical research laboratories as well as teaching the correct methodology of neurodiagnostic procedures, theory of operations, and theory of interpretation of results to trainees.

2. **Supervisory Electroencephalography Technician.** Individuals at this level plan and direct programs at affiliated medical centers and satellite outpatient clinics and have full supervisory responsibility for a large staff of non-supervisory personnel and at least one subordinate team leader or supervisor. Typically these duties include assigning and evaluating the work of subordinate staff resolving problems which may interfere with patient examination or treatment; providing Medical Instrument Technician (EEG) services in more complex and non-standard cases; evaluating new products and equipment and making recommendations concerning developments which would improve operations; participating as an instructor in the facility's clinical training program; making final decisions on selections based on recommendations from subordinate supervisors or leads; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

Appendix G – Medical Instrument Technician (Hemodialysis)

(1) **GS-6**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Skill in setting up, operating, and performing calibrations as required on a variety of dialysis equipment.
2. Skill in performing and interpreting test results (dialysate chemistries, water treatment testing for contaminants, etc.) including the ability to analyze deviations from the expected norm and responding appropriately.
3. Knowledge of American Association of Medical Instrumentation (AMMI) standards and unit policies as they relate to water treatment.
4. Knowledge of physiological and psychological changes and conditions related to end stage renal disease.
5. Ability to calculate dialysis baths according to the physician's orders per patient by mixing critical concentrates, i.e., calcium, potassium, and bicarbonate.
6. Knowledge of Basic Cardiac Life Support (BCLS).

(c) **Certification.** No certification is required; however, it is desirable that employees at this level have BCLS (Basic Cardiac Life Support) certification.

(d) **Assignment.** Hemodialysis Technicians at this level operate and monitor dialysis systems for chronic patients; check patient condition and determine the proper treatment procedures, technique, and machine adjustments; understand medical treatment for patients with renal failure; administer prescribed medication and observe the patient for desired action or adverse reaction; and recognize and react to signs and symptoms that signal the onset of complications of dialysis including hypotension, disequilibrium, seizures, and arrhythmias.

(2) **GS-7**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This would be experience which provided knowledge the equipment, standard procedures, and typical machine problems and/or patient reactions to treatment. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to assist the physician in more complex procedures such as central venous catheter insertion.
2. Ability to assist in training patients in home/self-care by teaching components of machine operation including water treatment and monitoring patients for compliance.
3. Ability to act as a mentor or preceptor to lower graded technicians.
4. Ability to analyze deviations from the expected, determine whether the deviations are machine or patient related, and respond according to the findings.

(c) **Certification.** No certification is required; however, it is desirable that employees at this level have BCLS (Basic Cardiac Life Support) and ACLS (Advanced Cardiac Life Support) certifications.

(d) **Assignment.** At this level in addition to providing hemodialysis for chronic patients, hemodialysis technicians assist the physician during central venous catheter insertion, assist in the training of patients for home dialysis/self-care, and act as a mentor or preceptor to lower graded hemodialysis technicians. At this level, the technician accepts responsibility and accountability for his/her own actions.

(3) **GS-8**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This would be experience which provided knowledge of the more complex procedures, the pharmacology related to this occupation, and knowledge of related acute disorders and diseases and their effects on organs and methods of treatment. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of the hemodialysis process and equipment needed for home/self care including knowledge of common machine problems and repairs to such equipment.
2. Knowledge of the equipment and procedures for peritoneal dialysis.
3. Ability to assist the physician with percutaneous renal biopsies and peritoneal catheter insertion.
4. Ability to provide instruction to dialysis patients in home/self care and in the maintenance of the equipment.
5. Ability to provide instruction for physicians, nurses, and other personnel in dialysis procedures, equipment operation and maintenance, etc.

(c) **Certification.** No certification is required; however, it is desirable that employees at this level have BCLS (Basic Cardiac Life Support) and ACLS (Advanced Cardiac Life Support) certifications.

(d) **Assignment.** This represents the full performance level. At this level the hemodialysis technician serves as a member of a dialysis team performing dialysis on acutely ill patients including those within an intensive care setting. Assignments involve performing both peritoneal and hemodialysis procedures. The dialysis technician may participate in percutaneous renal biopsies, watching the patient during the procedure and properly processing the specimen. Assists the physician in peritoneal catheter insertions and observes the patient for vital signs and provides post operative care. Provides instruction and monitors patients for home dialysis. Performs training of physicians, nurses, and technicians on hemodialysis and peritoneal dialysis techniques.

(4) **GS-9.** In addition to the core competencies defined at the GS-8 full performance level, positions at this grade may be lead, supervisory, or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Knowledge of the more complex examination and treatment procedures and techniques such as those provided for acutely ill patients and peritoneal dialysis in order to provide training and supervision in these procedures.

*2. Knowledge of JCAHO and other regulatory requirements.

3. Ability to communicate effectively and professionally with employees at varying grade levels.

*4. Ability to manage and supervise employees.

*5. Ability to provide, or provide for, staff development and training.

(c) **Certification.** Certification by one of the following organizations is highly desirable at this level: Nephrology Certification Commission (NNCC), Board of Nephrology Examiners, Inc., Nursing and Technology (BONENT), National Nephrology Certification Organization (NNCO), and the International Certification Commission for Clinical Engineering and Biomedical Technology (ICC) in conjunction with the United States Certification Commission (USCC). Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level.

(d) **Assignments.** 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.

1. **Special Assignments.** Non-supervisory hemodialysis technicians may have assignments that because of their nature substantially exceed the full performance level. The Professional Standards Board will review

proposed non-supervisory special assignments for the GS-9 level and make a determination regarding their appropriateness. These assignments are expected to be relatively few in number and must represent substantial additional responsibility over the full performance level.

2. Lead Hemodialysis Technician. In certain programs, either because of their size and scope or because of a lack of specific supervisory positions, lead positions may be appropriate.

3. Supervisory Hemodialysis Technician. Individuals in this assignment assume full administrative and professional responsibility for planning and directing the work of subordinate technicians. Typically these duties include assigning and evaluating the work of subordinate staff; providing dialysis technician services in more complex cases; reviewing and making recommendations regarding new and emerging procedures; providing instruction and training to new staff; interviewing candidates for positions; recommending selections, advancements, promotions; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

(5) **GS-10.** In addition to the core competencies defined at the GS-9 level, positions at this grade may be supervisory or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Advanced knowledge of the most complex and non-standard treatment and examination procedures and techniques.

***2.** Ability to plan and assist in the establishment of a completely integrated treatment and examination program.

***3.** Ability to evaluate new products and equipment and make recommendations concerning developments which would improve operations.

***4.** Ability to manage the fiscal matters of the functions supervised (which would include fund controls, contracts, and equipment expenditures), forecast resource and equipment needs, and administer the allocated budget.

***5.** Knowledge of and ability to provide the full range of supervisory duties which would include responsibility for assignment of work to be performed; performance evaluation; selection of staff; and recommendation of awards, advancements, and, when appropriate, disciplinary actions.

(c) **Certification.** Certification by one of the following organizations is highly desirable at this level: Nephrology Certification Commission (NNCC), Board of Nephrology Examiners, Inc., Nursing and Technology (BONENT), National Nephrology Certification Organization (NNCO), and the International Certification Commission for Clinical Engineering and Biomedical Technology (ICC) in conjunction

with the United States Certification Commission (USCC). Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level.

(d) **Assignments.** 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.

1. Special Assignments. There may be a rare non-supervisory position supporting this grade level. Such a position would typically include advising physicians on the creation of dialysate formulations not commercially available, determining contract requirements for all dialysis equipment, and evaluating the home environment and coordinating the modifications necessary for home dialysis.

2. Supervisory Hemodialysis Technician. Individuals at this level plan and direct programs at affiliated medical centers and their satellite outpatient clinics and have full supervisory responsibility for a large staff of non-supervisory personnel and at least one subordinate team leader or supervisor. Typically these duties include assigning and evaluating the work of subordinate staff resolving problems which may interfere with patient examination or treatment; providing dialysis technician services in more complex and non-standard cases; evaluating new products and equipment and making recommendations concerning developments which would improve operations; participating as an instructor in the facility's clinical training program; making final decisions on selections based on recommendations from subordinate supervisors or leads; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

Appendix H – Medical Instrument Technician (Perfusion)**(1) GS-9**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This represents the entry level for medical instrument technician (perfusion) positions. Applicants must demonstrate experience, education, or training which provided the basic knowledge, skills, and abilities to maintain extracorporeal circulation during heart surgery. This may be evidenced by certification by the American Board of Cardiovascular Perfusion (ABCP) as a Certified Clinical Perfusionist. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of the equipment and supplies needed for safe conduct of cardiopulmonary by-pass.
2. Knowledge of counter pulsation life support and insertion, maintenance, and removal of the intraaortic balloon pump.
3. Knowledge of blood sparing equipment (its uses, indications, and contraindications), blood banking procedures, blood storage and administration, and blood components (including platelet gel and sequestration).
4. Ability to operate ventricular assist devices (VAD) and assist with implantation, transportation, and removal of the device.
5. Knowledge of blood gases (using alpha stat or ph stat measures) and ability to analyze and apply lab results to patients under direct care on by-pass or VAD.

(c) **Certification.** Certification by the American Board of Cardiovascular Perfusion (ABCP) as a Certified Cardiovascular Perfusionist (CCP) is highly desirable.

(d) **Assignment.** Medical instrument technicians (perfusion) at this level operate the heart-lung machine, intra-aortic balloon pump, cell saver and blood salvaging equipment, and ventricular assist devices during open heart and coronary by-pass surgery. They analyze blood gasses and laboratory results in preparation for cardiopulmonary by-pass or while conducting cardiopulmonary by-pass.

(2) GS-10

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the positions being filled. This would be experience as a clinical perfusionist which provided the knowledge, skills, and abilities to function as a full member of the surgical team on the most critical and complex cases. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of occupation specific pharmacology and ability to give drug therapy and medications as necessary to maintain homeostasis.
2. Ability to maintain intra-operative and initial post-operative files of extracorporeal circulation data records and patient response postoperatively.
3. Ability to provide instruction for physicians, nurses, residents, medical and nursing students, and other personnel in perfusion procedures, equipment operation and maintenance, etc.

(c) **Certification.** Certification by the American Board of Cardiovascular Perfusion (ABCP) as a Certified Cardiovascular Perfusionist (CCP) is highly desirable.

(d) **Assignment.** This represents the full performance level. Medical instrument technicians (perfusion) at this level operate the heart-lung machine, intra-aortic balloon pump, cell saver and blood salvaging equipment, and ventricular assist devices during open heart and coronary by-pass surgery for patients representing the most complex and critical cases. They analyze blood gasses and laboratory results in preparation for cardiopulmonary by-pass or while conducting cardiopulmonary by-pass. They may also operate the equipment during heart transplantation. This could include participating as part of the team for retrieval and transportation of the donor heart. They also provide training to lower grade perfusion technicians, cardiac catheterization technicians, and ICU staff regarding all aspects of perfusion services.

(3) **GS-11**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the position to be filled, and must fully meet the KSAs at that level. This would be experience as a clinical perfusionist which provided the knowledge, skills, and abilities to function as a chief technician and/or program manager. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

- *1. Knowledge of quality assurance and performance improvement measures for perfusion programs.
- *2. Ability to identify training needs for lower graded staff and provide, or provide for this training.

(c) **Certification.** Certification by the American Board of Cardiovascular Perfusion (ABCP) as a Certified Cardiovascular Perfusionist (CCP) is highly desirable.

(d) **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. Medical Instrument Technicians (Perfusion) at this level function as Chief Technicians and/or program directors for the perfusion program. They are responsible for evaluating quality control and developing performance improvement programs for the program. They provide administrative oversight for lower graded Perfusion Technicians and for other personnel assigned to the program.

Appendix I – Medical Instrument Technician (Polysomnography)**(1) GS-6**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of standard, computerized polysomnographs for recording continuous all night physiological data including EEG, EOG, EKG, EMG and respiratory parameters.

2. Knowledge of standard devices such as oximeters, respiratory effort devices, nasal pressure devices, thermistors, thermocouples, continuous positive airway pressure (CPAP) machines, and laboratory computers including the ability to calibrate and operate the equipment and recognize and eliminate recording artifacts.

3. Knowledge of medical terminology and medical record organization to review medical records, sleep study orders, consent forms, medical charts, etc.

4. Knowledge of polysomnographic procedural protocols (including overnight sleep studies, MSLT, MWT, PAP, etc.).

5. Knowledge of basic anatomy and physiology and the international 10-20 electrode placement system in order to conduct the sleep studies.

(c) **Certification.** No certification or registration is required at this level. Basic Cardiac Life Support (BCLS) certification is desirable.

(d) **Assignment.** Polysomnography (PSG) Technicians at this level perform a full range of standard, routine examinations including overnight sleep studies, MSLT (Multiple Sleep Latency Test), MWT (Maintenance of Wakefulness Test), and PAP (Positive Airway Pressure Titration).

(2) GS-7

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This would be experience which provided the individual with the knowledge, skills, and abilities to independently conduct difficult but standardized polysomnography examinations. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of CPAP function and operation to select and fit appropriate PAP patient interface devices.

2. Ability to independently titrate and document PAP level to achieve therapeutic goals.

3. Knowledge of indications, complications, and contraindications of CPAP therapy.
4. Knowledge of Bi-Level pressure titrations.
5. Ability to recognize changes seen during the PSG tracing and identify all stages of sleep. This includes the ability to score and analyze sleep stages in clinical polysomnography recordings.

(c) **Certification.** No certification or registration is required. Basic Cardiac Life Support (BCLS) certification is desirable.

(d) **Assignment.** At this level the Polysomnography Technician performs a full range of standard, but complex, polysomnography examinations with responsibility for properly and accurately calibrating all instruments prior to the beginning of the PSG tracing and selection of appropriate electrode montages and sensitivity and filter settings to elicit the best possible tracings. They independently determine the need for CPAP during all night sleep studies for sleep apnea. They may administer nerve conduction velocity tests.

(3) **GS-8**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This would be experience which provided a knowledge of the more complex procedures as well as knowledge of the uncommon and/or rare sleep disorders. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Advanced knowledge of the International Classification of Sleep Disorders and the ability to recognize uncommon and/or rare sleep disorders.
2. Ability to summarize and report polysomnographic data in narrative form.
3. Knowledge of event characteristics (e.g., respiratory, cardiac, sleep stage, seizures, etc.) and ability to take appropriate action.
4. Ability to provide briefings and orientation to hospital staff including physicians.

(c) **Certification.** No certification or registration is required. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level.

(d) **Assignment.** This represents the full performance level. At this level Polysomnographic Technicians are able to interact fully with the patient and physician to diagnose sleep disorders including those that are uncommon or rare. They are able to conduct full sleep studies including overnight studies and evaluate the relationship of events, sleep stages, and possible medical conditions which influence or result from events occurring during sleep. They anticipate problems likely to occur during the sleep study and prepare for such situations, make changes in established procedures, or recommend alternative courses of action. They are able to mentor lower graded technicians.

(4) **GS-9.** In addition to the core competencies defined at the GS-8 level, positions at this grade may be lead, supervisory, or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. This would be experience which demonstrates possession of the knowledge required to provide all aspects of polysomnography services. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Knowledge of the more complex examination and treatment procedures and techniques in order to provide training and supervision in these procedures, to evaluate and initiate performance improvement projects, and to write policies, procedures, and protocols, that pertain to Polysomnography.

*2. Knowledge of JCAHO and other regulatory requirements.

3. Ability to communicate effectively and professionally with employees at varying grade levels.

*4. Ability to manage and supervise employees.

*5. Ability to provide, or provide for, staff development and training.

(c) **Certification.** Registration by the Board of Registered Polysomnographic Technologists (BRPT) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level.

(d) **Assignments.** 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.

1. **Special Assignments.** Non-supervisory polysomnography technicians may have assignments that because of their nature substantially exceed the full performance level. The Professional Standards Board will review proposed non-supervisory special assignments for the GS-9 level and make a determination regarding their appropriateness. These assignments are expected to be relatively few in number and must represent substantial additional responsibility over the full performance level.

2. **Lead Polysomnography Technician.** In certain programs, either because of their size and scope or because of a lack of specific supervisory positions, lead positions may be appropriate.

3. **Supervisory Polysomnography Technician.** Individuals in this assignment assume full administrative and professional responsibility for planning and directing the work of subordinate technicians. Typically these duties include assigning and evaluating the work of subordinate staff; providing polysomnography technician services in more complex cases; reviewing and making recommendations regarding new and emerging procedures; providing instruction and training to new

staff; interviewing candidates for positions; recommending selections, advancements, promotions; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

(5) **GS-10.** In addition to the core competencies defined at the GS-9 level, positions at this grade may be supervisory or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. This would be experience which demonstrates possession of the knowledge required to provide the most complex polysomnography technician services. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Advanced knowledge of complex and non-standard treatment and examination procedures and techniques.

*2. Ability to plan and assist in the establishment of a completely integrated treatment and examination program.

*3. Ability to evaluate new products and equipment and make recommendations concerning developments which would improve operations.

*4. Ability to manage the fiscal matters of the functions supervised (which would include fund controls, contracts, and equipment expenditures), forecast resource and equipment needs, and administer the allocated budget.

*5. Knowledge of and ability to provide the full range of supervisory duties which would include responsibility for assignment of work to be performed; performance evaluation; selection of staff; and recommendation of awards, advancements, and, when appropriate, disciplinary actions.

(c) **Certification.** Registration by the Board of Polysomnographic Technologists (BRPT) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level.

(d) **Assignments.** 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.

1. **Special Assignments.** There may be a rare non-supervisory position supporting this grade level. Such a position would typically include producing preliminary polysomnographic interpretations and recommendations for presentations at case conferences as well as developing, updating, and annually reviewing all sleep laboratory policies and procedures to assure that the laboratory operates according to national standards of practice.

2. Supervisory Polysomnographic Technician. Individuals at this level plan and direct programs at affiliated medical centers and satellite outpatient clinics and have full supervisory responsibility for a large staff of non-supervisory personnel and at least one subordinate team leader or supervisor. Typically these duties include assigning and evaluating the work of subordinate staff resolving problems which may interfere with patient examination or treatment; providing polysomnography technician services in more complex and non-standard cases; evaluating new products and equipment and making recommendations concerning developments which would improve operations; participating as an instructor in the facility's clinical training program; making final decisions on selections based on recommendations from subordinate supervisors or leads; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

Appendix J – Medical Instrument Technician (Pulmonary Function)

(1) GS-6

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of proper administration of metered dose inhalers and the various medications associated with bronchodilation including understanding of the contraindications and dangers of such pharmaceutical agents.

2. Knowledge of the proper use and placement of pulse oximetry equipment and sensors.

3. Knowledge of universal precautions and aseptic techniques for cleaning equipment to provide a safe environment for performing tests.

4. Ability to perform routine, standardized pulmonary function tests.

5. Ability to recognize adverse reactions to treatment that may indicate the need to terminate procedures and to call the physician's attention to unusual reactions to administered medications.

(c) **Certification.** No certification or registration is required; however it is desirable that technicians at this level have Basic Cardiac Life Support (BCLS) certification.

(d) **Assignment.** Technicians at this level perform routine pulmonary function tests in a hospital or clinic. They administer inhaled medications for the purpose of bronchodilator response. They operate, calibrate, and maintain commonly used instruments such as blood gas analyzers, oximeters, and gas nebulizers. They conduct standardized tests such as forced and slow vital capacity, blood gas analysis, and flow volume loops. They instruct patients when and how to perform breathing exercises. They calculate and measure blood gas values. They use aseptic methods to draw blood samples from patients and properly use and clean equipment.

(2) GS-7

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This would be experience which provided knowledge the equipment, standard tests and procedures, and typical readings. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Ability to perform arterial punctures, analyze blood gases, and interpret blood gas measurements including the ability to determine if the sample is accurate for reporting, assess for inaccuracy, and correct inaccurate samples.

2. Knowledge of lung mechanics and ability to perform a variety of spirometry and complex pulmonary function tests on both ambulatory and non-ambulatory patients.

3. Ability to determine the order of priority for administering multiple pulmonary function tests, choose the most appropriate equipment and techniques for the type of ventilatory problem, and determine the proper sequence of steps to complete the testing.

4. Ability to measure the pulmonary function of patients for the purpose of diagnosing disease, determining responsiveness to treatment, and assessing disability.

(c) **Certification.** No certification or registration is required; however, Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are desirable for employees at this level.

(d) **Assignment.** Assignments at this level require the technician to have knowledge of the basic principles of pulmonary physiology sufficient to understand impairment of lung function and to be able to utilize that information in the design of individualized tests to help solve specific problems. They perform complex but standardized tests and procedures. They fully explain procedures to the patient and are aware of possible complications and adverse reactions to the performance of pulmonary function testing.

(3) **GS-8**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This would be experience which provided knowledge of the more complex procedures, the pharmacology related to this occupation, and knowledge of related acute disorders and diseases and their effects on organs and methods of treatment. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to perform special procedures pulmonary function testing which may include cardiopulmonary exercise testing, exercise induced asthma testing, Shunt testing, and/or P-100 testing.

2. Knowledge of airway management, pulmonary pharmacology, CPR, and oxygen administration.

3. Knowledge of bio-testing procedures, syringe quality control procedures, and ability to analyze results for compliance.

4. Ability to perform quality control on blood gas analyzers as required by accrediting bodies.

5. Ability to provide training to lower graded pulmonary function technicians and students including teaching the correct methodology of pulmonary function procedures and theory of interpretation of results.

(c) **Certification.** No certification or registration is required; however, Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are desirable for employees at this level.

(d) **Assignment.** This represents the full performance level. At this level assignments are characterized by performance of the complex, non-routine Pulmonary Function tests and procedures. Technicians are

expected to provide emergency airway management when patients deteriorate in the Laboratory including bronchodilator nebulization, provision of supplemental oxygen, bag-and-mask ventilation, cardio-pulmonary resuscitation and to assist with or perform airway intubation and defibrillation.

(4) **GS-9.** In addition to the core competencies defined at the GS-8 full performance level, positions at this grade may be lead, supervisory, or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Knowledge of the more complex examination and treatment procedures and techniques such as cardiopulmonary pulmonary exercise testing, exercise induced asthma testing, Shunt testing, and/or P-100 testing in order to provide training and supervision in these procedures, to develop analysis interpretation formats, and to receive inquiries concerning results.

*2. Knowledge of JCAHO and other regulatory requirements.

3. Ability to communicate effectively and professionally with employees at varying grade levels.

*4. Ability to manage and supervise employees.

*5. Ability to provide, or provide for, staff development and training.

(c) **Certification.** Certification by the National Board of Respiratory Care as a Certified Pulmonary Function Technologist (CPFT) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level.

(d) **Assignments.** 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.

1. **Special Assignments.** Non-supervisory pulmonary function technicians may have assignments that because of their nature substantially exceed the full performance level. The Professional Standards Board will review proposed non-supervisory special assignments for the GS-9 level and make a determination regarding their appropriateness. These assignments are expected to be relatively few in number and must represent substantial additional responsibility over the full performance level.

2. **Lead Pulmonary Function Technician.** In certain programs, either because of their size and scope or because of a lack of specific supervisory positions, lead positions may be appropriate.

3. Supervisory Pulmonary Function Technician. Individuals in this assignment assume full administrative and professional responsibility for planning and directing the work of subordinate technicians. Typically these duties include assigning and evaluating the work of subordinate staff; providing pulmonary function technician services in more complex cases; reviewing and making recommendations regarding new and emerging procedures; providing instruction and training to new staff; interviewing candidates for positions; recommending selections, advancements, promotions; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

(5) **GS-10.** In addition to the core competencies defined at the GS-9 level, positions at this grade may be supervisory or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Advanced knowledge of complex and non-standard treatment and examination procedures and techniques.

*2. Ability to plan and assist in the establishment of a completely integrated treatment and examination program.

*3. Ability to evaluate new products and equipment and make recommendations concerning developments which would improve operations.

*4. Ability to manage the fiscal matters of the functions supervised (which would include fund controls, contracts, and equipment expenditures), forecast resource and equipment needs, and administer the allocated budget.

*5. Knowledge of and ability to provide the full range of supervisory duties which would include responsibility for assignment of work to be performed; performance evaluation; selection of staff; and recommendation of awards, advancements, and, when appropriate, disciplinary actions.

(c) **Certification.** Certification by the National Board of Respiratory Care as a Certified Pulmonary Function Technologist (CPFT) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable for employees at this level.

(d) **Assignments.** 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.

Supervisory Pulmonary Function Technician. Individuals at this level plan and direct programs at affiliated medical centers and satellite outpatient clinics and have full supervisory responsibility for a

large staff of non-supervisory personnel and at least one subordinate team leader or supervisor. Typically these duties include assigning and evaluating the work of subordinate staff resolving problems which may interfere with patient examination or treatment; providing pulmonary function technician services in more complex and non-standard cases; evaluating new products and equipment and making recommendations concerning developments which would improve operations; participating as an instructor in the facility's clinical training program; making final decisions on selections based on recommendations from subordinate supervisors or leads; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

Appendix K – Medical Instrument Technician (Vascular)**(1) GS-6**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the position to be filled. This would be experience which demonstrates the knowledge, skills, and abilities to perform routine, standardized vascular ultrasound procedures where the technician is not expected to deviate from established procedures. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Ability to perform standardized, routine vascular ultrasound procedures and/or examinations of upper and lower extremity, abdominal, and extra-cranial cerebrovascular vessels.

2. Knowledge of anatomy and physiology including location and function of major body organs and structures as they relate to vascular ultrasonography.

3. Ability to prepare preliminary reports from the examination including documentation of procedural difficulties in the medical record.

(c) **Certification.** Basic Cardiac Life Support (BCLS) certification is desirable.

(d) **Assignment.** Assignments at this level are characterized by the performance of routine, standardized vascular ultrasound procedures and techniques in accordance with instructions.

(2) GS-7

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the positions to be filled. This would be experience which demonstrates that the technician has the knowledge, skills, and abilities to perform complex procedures requiring the ability to select appropriate equipment based on symptomology and the objective of the examination and the ability to adapt procedures and techniques to enhance diagnostic results. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Ability to perform noninvasive vascular ultrasound procedures or examinations of upper and lower extremity, abdominal, and extra-cranial cerebrovascular vessels which require adaptation of procedures or instruments.

2. Knowledge of anatomy and physiology including location and function of major body organs and structures as they relate to vascular ultrasonography. This would also include knowledge of physiological influences on the hemodynamics of blood flow.

3. Knowledge of pharmacology and chemistry to understand drug reactions, action, effects, and method of administration specifically related to vascular ultrasonography.

4. Knowledge of disease entities that impact the vascular system and their influence on the test results to select the appropriate procedures.

5. Ability to obtain a patient history and perform an appropriate physical assessment based on patient presentation and type of exam to include observation, inspection, auscultation, and palpation.

(c) **Certification.** Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are desirable.

(d) **Assignment.** At the GS-7 level the medical instrument technician (vascular) is expected to perform complex noninvasive vascular testing for diagnostic purposes. These procedures are performed with a variety of testing equipment and modalities to include B mode scanning, duplex imaging, Doppler spectral analysis, photoplethysmography, and upper and lower extremity, digit, and pensile blood pressures. The technician must be able to deviate from normal technique when necessary.

(3) **GS-8**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level which demonstrates the knowledge, skills, abilities, and other characteristics related to the duties of the position to be filled. This would be experience which demonstrates the knowledge, skills, and abilities to perform noninvasive vascular ultrasound procedures as a senior technician. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of cross-sectional and longitudinal vascular anatomy in normal and abnormal vessels, anatomical planes and tissue structures, physiologic effects of disease entities that impact the vascular system, signs and symptoms of acute and chronic vascular disease, and the characteristic appearance of aneurysms, pseudoaneurysms, thromboses, stenoses, occlusions, AV fistulae, and morphology of atherosclerotic plaque formulation.

2. Ability to provide Doppler information of peripheral vessels; demonstrate characteristic differences related to the organs they supply; accurately quantify carotid artery stenoses; and identify and correlate specific waveform analysis, plethysmographic tracings, velocity changes, and pressure gradients characteristic of normal, obstructed, or occluded vessels or grafts.

3. Ability to perform intracranial (transcranial) vascular examinations.

4. Ability to operate the instruments to extract the highest quality image utilizing the appropriate transducer frequency, Doppler angle, focal zones, gain, depth, color map, wall filter, and sample volume.

5. Ability to provide objective data to document progression or regression of disease.

(c) **Certification.** Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are desirable.

(d) **Assignment.** This represents the full performance level. At the GS-8 level the medical instrument technician (vascular) functions as a senior technician. They are expected to perform the full range of vascular ultrasound procedures including the most complex and non-routine and to make appropriate adjustments in established procedures and techniques to obtain the results required for clinical diagnosis and documentation. At this level the technician would also have the ability to perform intracranial (transcranial) vascular examinations.

(4) **GS-9.** In addition to the core competencies defined at the GS-8 full performance level, positions at this grade may be lead, supervisory, or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. This would be experience which demonstrates the knowledge, skills, and abilities to fully perform all vascular ultrasound tests and examinations and to function as a technical director of the vascular laboratory and provide oversight and/or guidance to other technicians. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Knowledge of the more complex examination and treatment procedures and techniques in order to provide training and supervision in these procedures, to evaluate and initiate performance improvement projects, and to write policies, procedures, and protocols, that pertain to vascular ultrasonography.

*2. Knowledge of JCAHO and other regulatory requirements.

3. Ability to communicate effectively and professionally with employees at varying grade levels.

*4. Ability to manage and supervise employees.

*5. Ability to provide, or provide for, staff development and training.

(c) **Certification.** Registration by Cardiovascular Credentialing International (CCI) as a Registered Vascular Sonographer (RVS) or by the American Registry of Diagnostic Medical Sonographers (ARDMS) as a Registered Vascular Technologist (RVT) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are also desirable.

(d) **Assignments.** 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.

1. **Special Assignments.** Non-supervisory vascular technicians may have assignments that because of their nature substantially exceed the full performance level. The Professional Standards Board will review proposed non-supervisory special assignments for the GS-9 level and make a determination regarding their appropriateness. These assignments are expected to be relatively few in number and must represent substantial additional responsibility over the full performance level.

2. Lead Vascular Technician. In certain programs, either because of their size and scope or because of a lack of specific supervisory positions, lead positions may be appropriate.

3. Supervisory Vascular Technician. Individuals in this assignment assume full administrative and professional responsibility for planning and directing the work of subordinate technicians. Typically these duties include assigning and evaluating the work of subordinate staff; providing Vascular Sonography services in more complex cases; reviewing and making recommendations regarding new and emerging procedures; providing instruction and training to new staff; interviewing candidates for positions; recommending selections, advancements, promotions; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

(5) **GS-10.** In addition to the core competencies defined at the GS-9 level, positions at this grade may be supervisory or non-supervisory with specialized advanced knowledge and assignments.

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level, which is directly related to the duties of the position to be filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities.** KSAs 1, 2, and 3 are appropriate for all positions at this level. KSAs 4 and 5 are to be used in accordance with their appropriateness for the specific assignment.

1. Advanced knowledge of the most complex and non-standard treatment and examination procedures and techniques.

*2. Ability to plan and assist in the establishment of a completely integrated treatment and examination program.

*3. Ability to evaluate new products and equipment and make recommendations concerning developments which would improve operations.

*4. Ability to manage the fiscal matters of the functions supervised (which would include fund controls, contracts, and equipment expenditures), forecast resource and equipment needs, and administer the allocated budget.

*5. Knowledge of and ability to provide the full range of supervisory duties which would include responsibility for assignment of work to be performed; performance evaluation; selection of staff; and recommendation of awards, advancements, and, when appropriate, disciplinary actions.

(c) **Certification.** Registration by Cardiovascular Credentialing International (CCI) as a Registered Vascular Sonographer (RVS) or by the American Registry of Diagnostic Medical Sonographers (ARDMS) as a Registered Vascular Technologist (RVT) is highly desirable. Basic Cardiac Life Support (BCLS) and Advanced Cardiac Life Support (ACLS) certifications are desirable.

(d) **Assignments.** 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.

1. Special Assignments. There may be a rare non-supervisory position supporting this grade level. Such a position would typically include knowledge of standards of medical practice in applicable medico-legal responsibilities in vascular ultrasound procedures as well as teaching the correct methodology of vascular ultrasound procedures, theory of operations, and theory of interpretation of results to trainees.

2. Supervisory Vascular Technician. Individuals at this level plan and direct programs at affiliated medical centers and their satellite outpatient clinics and have full supervisory responsibility for a large staff of non-supervisory personnel and at least one subordinate team leader or supervisor. Typically these duties include assigning and evaluating the work of subordinate staff resolving problems which may interfere with patient examination or treatment; providing vascular sonography services in more complex and non-standard cases; evaluating new products and equipment and making recommendations concerning developments which would improve operations; participating as an instructor in the facility's clinical training program; making final decisions on selections based on recommendations from subordinate supervisors or leads; evaluating performance; taking disciplinary action when necessary; and identifying educational or training needs.

Authority: 38 U.S.C. §§ 7402, 7403.

APPENDIX G-28. PHARMACY TECHNICIAN QUALIFICATION STANDARD
GS-661
Veterans Health Administration

1. COVERAGE. This standard applies to all pharmacy technician positions in the Veterans Health Administration (VHA). Under the supervision of a pharmacist, pharmacy technicians perform routine pharmacy functions including receiving prescriptions from patients in writing or electronically from physicians. Pharmacy technicians prepare prescriptions by counting, pouring, weighing, measuring, and mixing the medication if necessary. Pharmacy technicians maintain patient profiles, prepare insurance claim forms, stock, and take inventory of medications. Pharmacy technicians prepare medications for inpatients in various settings, including sterile product preparation.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Noncitizens may be appointed when it is not possible to recruit qualified citizens in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Education or Experience.** A high school diploma or equivalent; or at least 3 months experience.

c. **Certification.** Certification by the National Pharmacy Technician Certification Board (PTCB) is required at grades GS-6 and above.

d. **Loss of Credential.** An employee in this occupation who fails to obtain licensure/certification/registration within the required time frame, or who fails to maintain the required licensure/certification/registration must be removed from the occupation, which may also result in termination of employment.

For occupations which require an active credential (licensure/certification/registration) at all grade levels, at the discretion of the appointing official, an employee may be reassigned to another occupation for which he/she qualifies if a placement opportunity exists. For occupations which require an active credential (licensure/certification/registration) in assignments above the full-performance level only, at the discretion of the appointing official, an employee may remain at an appropriate lower grade level in the occupation when both of the following apply: the credential is not a requirement and a placement opportunity exists.”

e. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

**PART II
APPENDIX G2**

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

f. **Physical Requirements.** See VA Directive and Handbook 5019.

g. **English Language Proficiency.** Pharmacy technicians appointed to direct patient care positions must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS

a. Definitions

(1) **Creditable Experience.** To be creditable, the experience must have required the use of knowledge, skills, abilities, and other characteristics associated with the scope of pharmacy technician practice.

(2) **Quality of Experience.** To be creditable, pharmacy technician experience must be documented on the application and verified in an employment reference, or through other independent means.

(3) **Part-time Experience.** Part-time experience as a pharmacy technician is credited according to its relationship to the full-time workweek. For example, a pharmacy technician would receive 1 week of full-time credit for each 2 weeks of half-time work.

(4) **Grade Determinations.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates:

(1) **GS-2**

(a) **Experience.** None beyond the basic requirement.

(b) **Assignment.** Employees at this grade level serve in a pharmacy technician/aide-training level position.

(2) **GS-3**

(a) **Education or Experience.** Completion of 1 year of post-high school coursework related to medicine (e.g. chemistry, biology, college mathematics, etc.), or successful completion of a 1 year accredited pharmacy technician training program, or 6 months of general experience, that may have included experience in another medical field (licensed practical nurse, laboratory technology, etc.). In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to maintain appropriate files.
2. Ability to prepare sterile compounds under supervision.
3. Ability to communicate with patients and other health professions.

(c) **Assignments.** Employees at this grade level serve in a pharmacy technician/aide training level position.

(3) **GS-4**

(a) **Education or Experience.** Successful completion of 2 years above high school with courses related to pharmacy or pharmacy technology, or 1 year of general experience that may have included experience in another medical field (licensed practical nurse, laboratory technology, etc.) Successful completion of a course for medical technicians, hospital corpsmen, medical service specialists, or hospital training obtained in a training program conducted by the Armed Forces or the U.S. Maritime Service under close medical and professional supervision is creditable on a month-for-month basis for general experience. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to process and fill prescriptions under supervision.
2. Ability to operate and maintain dispensing equipment.
3. Ability to operate pharmacy information systems.
4. Ability to maintain appropriate files.

**PART II
APPENDIX G28**

5. Ability to prepare sterile compounds under supervision.

(c) **Assignments.** Pharmacy technicians at the GS-4 level perform all duties expected of employees at the GS-3 level; however, they are expected to exercise greater judgment, require less supervision, and to operate in accordance with all established policies, procedures, and techniques.

(4) **GS-5**

(a) **Education or Experience.** Successful completion of a 4-year course of study above high school leading to a bachelor's degree that included at least 24 semester hours of courses related to pharmacy or pharmacy technology; successful completion of pertinent specialized training courses in pharmaceutical and pharmacy services while serving in the Armed Forces is creditable on a month-for-month basis up to the 1 year of experience required for the GS-5 level; or at least 1 year of experience at the next lower level that demonstrates the core competencies (KSAs) described at the GS-4 level. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to operate and care for automated dispensing devices and equipment.
2. Knowledge of, and ability to perform, aseptic technique.
3. Knowledge of basic inventory procedures.
4. Knowledge of pharmacy information systems.

(c) **Assignments.** This is the full performance level for pharmacy technicians. Employees at this grade level serve as staff pharmacy technicians receiving little guidance from more experienced staff members for more complex patients and procedures, and require minimal supervision.

(5) **GS-6**

(a) **Experience.** One year experience at the next lower level, and must fully meet the KSAs at the next lower level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Certification.** PTCB certification is required at this grade level and above.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to solve problems and make recommendations, e.g., troubleshoot operational problems and refer for appropriate action.
2. Knowledge of the operation and care of automated equipment.

3. Knowledge of, and ability to follow, written instructions for compounding with aseptic technique for hazardous materials such as oncology agents.

4. Knowledge, and ability to perform, compounding with aseptic technique for routine sterile products.

5. Knowledge of policies and procedures for inventory management in specialized areas such as emergency carts.

6. Knowledge of the computerized prescription process demonstrated by the ability to input prescriptions and medication orders.

(d) **Assignments.** Pharmacy technicians may be assigned to any area of the pharmacy including expanded distributive function assignments; for example assignment as team leaders for specific process improvement teams involving technical areas or performing more highly complex duties including preparation of oncology agents for clinical pharmacy specialists. 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.

(6) **GS-7**

(a) **Experience.** One year experience at the next lower level and must fully meet the KSAs at the next lower level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

*1. Ability to evaluate, analyze workflow, and coordinate work activities.

2. Ability to independently gather, evaluate, and analyze data to generate reports and/or for other projects/statistical purposes.

3. Knowledge of pharmacy policies and procedures sufficient to train and orient new employees and other staff

4. Comprehensive knowledge of the operation and care of specialized pharmaceutical equipment.

5. Comprehensive knowledge of the procurement and formulary process.

6. Comprehensive knowledge of investigational drug policies and procedures.

7. Comprehensive knowledge of controlled substance policies and procedures, and the ability to identify and investigate discrepancies in these policies and procedures.

8. Comprehensive knowledge of, and ability to, analyze data in VA information systems.

**PART II
APPENDIX G28**

(c) **Assignments.** 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. Pharmacy technicians at this grade level may be assigned as a supervisor; lead technician in a particular area of the pharmacy; a controlled substance technician; an investigational drug technician; a procurement/inventory management technician; a clinical pharmacy technician; or similar assignment with this level of complexity. The GS-7 level is for select, complex pharmacy technician positions, as established by each health care facility. To be advanced, employees must meet all of the following standards, provided the standard is part of their assignment.

Determinations concerning placement of positions at this grade level shall take into consideration the skill mix and the availability of supervision in the work unit. Although these positions are under the supervision of a pharmacist, employees in such settings successfully and consistently demonstrate the exercise of independent technical judgment (without the need for readily available supervision) as well as comprehensive and thorough working knowledge of the most complex or difficult practices and procedures. Such individuals may also serve as leaders or co-leaders in a Pharmacy Service or for a specific unit or section.

(7) GS-8

(a) **Experience.** One year experience at the next lower level and must fully meet the KSAs at the next lower level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) Demonstrated Knowledge, Skills, and Abilities

*1. Knowledge of human resource management policies and procedures, and the ability to supervise various levels of pharmacy technicians and other technical personnel (for supervisory assignments).

*2. Ability to apply management and leadership principles.

3. Ability to communicate orally and in writing.

4. Extensive working knowledge of the pharmacy operation.

5. Ability to assess staff needs and provide appropriate training.

(c) **Assignments.** 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. Pharmacy technicians at this level may be assigned supervisory positions or assignments as lead technicians in a highly complex area of the pharmacy. The GS-8 level is for very select, complex pharmacy technician positions as established by each health care facility. To be advanced, employees must meet all of the following standards, provided the standard is part of their assignment.

Determinations concerning placement of positions at this grade level shall take into consideration the skill mix and availability of supervision in the work unit. Although these positions are under the

supervision of a pharmacist, employees in such settings successfully and consistently demonstrate the exercise of independent technical judgment (without the need for readily available supervision) as well as comprehensive and thorough working knowledge of the most complex or difficult practices and procedures. Such individuals may also serve as supervisors or in an equivalent assignment in a Pharmacy Service, or for a specific unit or section.

4. DEVIATIONS

- a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for pharmacy technicians in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements on the proposed grade.
- b. Under no circumstances will the certification requirements be waived.
- c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

**APPENDIX G-29. AUDIOLOGIST QUALIFICATION STANDARD
GS-665****Veterans Health Administration**

1. COVERAGE. The following are requirements for appointment as an audiologist in the Veterans Health Administration (VHA). These requirements apply to all VHA audiologists in the General Schedule (GS)-665 series. VHA audiologists provide clinical service to veterans and other beneficiaries in VHA medical centers, clinics, domiciliaries, nursing care facilities, community care settings, Community-Based Outpatient Clinics, Veterans Outreach Centers, Veterans Integrated Service Network (VISN) offices, and VHA Central Office. In performing these duties, VHA audiologists demonstrate professional knowledge of, and skill in applying, a wide range of theories, principles, and methodologies of the practice of audiology.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified citizens in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Education.** Master's degree or its equivalent in audiology or hearing science from an accredited college or university is required. "Accredited" means a college or university accredited by a regional accreditation organization and an audiology program accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (ASHA).

NOTE: Beginning on January 1, 2007, the Council on Academic Accreditation (CAA) in Audiology and Speech-Language Pathology of ASHA will accredit only doctoral degree programs in audiology or hearing science.

c. **Licensure.** For those grades that require licensure (GS-12 and above), within 2 years of initial appointment under this standard the incumbent must hold a full, current, and unrestricted license in a State, Territory, Commonwealth, or the District of Columbia. A staff audiologist who fails to obtain licensure within 2 years of initial appointment under this standard will be terminated.

NOTE: The audiologist must maintain full, current, and unrestricted licensure/registration.

(1) Non-licensed audiologists who otherwise meet the eligibility requirements for licensure may be given a temporary appointment as a graduate audiologist under the authority of 38 U.S.C. § 7405 (a) (1) (D). Failure to obtain licensure during appointment as a graduate audiologist is justification for termination of the temporary appointment. Individuals appointed as graduate audiologists may not be promoted to the GS-12 level without being fully licensed. This may result in termination of employment.

(2) **Loss of Credential.** An employee in this occupation who fails to obtain licensure/certification/registration within the required time frame, or who fails to maintain the required licensure/certification/registration must be removed from the occupation, which may also result in termination of employment.

**PART II
APPENDIX G29**

For occupations which require an active credential (licensure/certification/registration) at all grade levels, at the discretion of the appointing official, an employee may be reassigned to another occupation for which he/she qualifies if a placement opportunity exists. For occupations which require an active credential (licensure/certification/registration) in assignments above the full-performance level only, at the discretion of the appointing official, an employee may remain at an appropriate lower grade level in the occupation when both of the following apply: the credential is not a requirement and a placement opportunity exists.

(3) An audiologist who has, or has ever had, his/her audiology license revoked, suspended, denied, restricted, limited, or issued/placed in a probationary status may be appointed only in accordance with the provisions in Chapter 3, section B, paragraph 16 of this part.

(4) **Exception.** The requirement for licensure may be waived by the Under Secretary for Health or designee in VHA Central Office for individuals engaged in research or academic assignments involving no direct patient care duties, in accordance with current activities.

d. Grandfathering Provision. The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

e. **Physical Requirements.** See VA Directive and Handbook 5019

f. **English Language Proficiency.** Audiologists must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS

a. Definitions

(1) Creditable Experience

(a) **Knowledge of Contemporary Professional Audiology Practice.** To be creditable, the experience must have required the use of knowledge, skills, abilities, and other characteristics associated with contemporary professional audiology practice. This knowledge may be evidenced by one or more of the following:

1. At least 1 year of active professional practice or its equivalent. Active professional practice means paid or non-paid employment as a professional audiologist engaged in the practice of audiology as defined by the appropriate licensing board.

2. Academic course work leading to a doctoral degree in audiology or hearing science.

(b) **Quality of Experience.** Experience is only creditable if it is both of the following:

1. Work as a professional audiologist directly related to the position to be filled; and

2. At a level comparable to audiology experience at the next lower grade level.

(c) **Part-Time Experience.** Part-time experience as a professional audiologist is credited according to its relationship to the full-time workweek. For example, an audiologist would receive 1 week of full-time credit for each 2 weeks of half-time work.

b. **Grade Determinations.** In addition to the basic requirements for employment, the following criteria must be met when determining grades.

(1) GS-9

(a) **Education and Experience.** None beyond the basic requirements.

(b) **Assignment.** Employees at this level serve in an audiologist career development position.

(2) GS-11

**PART II
APPENDIX G29**

(a) **Education and Experience.** Completion of 1 year of professional experience as an audiologist equivalent to the next lower level; or 3 years of progressively higher level graduate education leading to a doctoral degree; or doctoral degree in audiology, hearing science, or a directly related field. For positions involved in research audiologist assignments involving no direct patient care, no additional education or professional experience is required beyond those identified at the GS-9 level. In addition, the candidate must demonstrate the following KSAs:

(b) **Assignments.** Audiologists at this grade level may be appointed to one of the following assignments:

1. Staff Audiologist. Staff audiologists at this grade level perform audiology assessment and treatment intervention. If unlicensed, the individual must function under the supervision of a licensed audiologist.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of contemporary audiology practice;

(2) Ability to communicate orally and in writing;

(3) Knowledge of anatomy, physiology, acoustics, applied acoustics, communication, psychoacoustics, and auditory/vestibular pathophysiology;

(4) Knowledge of principles and techniques in the assessment and treatment of auditory and balance disorders;

(5) Ability to perform functions associated with contemporary audiology scope of practice; and

(6) Ability to interact with patients, families, and other health care professionals.

2. Research Audiologist. Research audiologists at this grade level serve as research assistants. At this grade level, research audiologists conduct research under the direct supervision of principal investigators or co-principal investigators of higher grade level.

a. Demonstrated Knowledge, Skills, and Abilities. In addition to the KSAs required in 1.a. above, the following are required:

(1) Knowledge of, and ability to apply, appropriate basic scientific methods, basic research design and statistics; and

(2) Project-specific knowledge of clinical and research literature.

(3) **GS-12**

(a) **Licensure.** For those grades that require licensure (GS-12 and above), within 2 years of initial appointment under this standard the incumbent must hold a full, current, and unrestricted license in a State, Territory, Commonwealth, or the District of Columbia. A staff audiologist who fails to obtain licensure within 2 years of initial appointment under this standard will be terminated.

(b) **Education and Experience.** In addition to the requirements at the GS-11 level, completion of 1 year of professional experience comparable to the next lower level and possession of a full, current and unrestricted license to practice audiology. For positions involved in research audiology assignments involving no direct patient care, completion of a doctoral degree in audiology, hearing science, or a related field is fully qualifying. In addition, the candidate must demonstrate the following KSAs:

(c) **Assignments.** Audiologists at this grade level are independent licensed practitioners and are considered to be at the full performance level. Employees may be appointed to one of the following assignments:

1. Staff Audiologist. Staff audiologists at this grade level must demonstrate professional knowledge of, and skill in applying, a wide range of theories, principles, and methodologies of the practice of audiology to a wide range of populations. Individuals may perform ancillary assignments, including program management duties on an occasional basis, where the complexity and amount of work is not substantial.

a. Demonstrated Knowledge, Skills, and Abilities

- (1) Ability to develop coherent treatment strategies;
- (2) Knowledge of clinical services, and the ability to perform them independently;
- (3) Ability to conduct assessments and provide treatment interventions;
- (4) Ability to provide consultation to other health care professionals;
- (5) Knowledge of contemporary audiology practice; and
- (6) Ability to perform functions associated with contemporary audiology scope of practice.

2. Research Audiologist. Research audiologists at this grade level assist principal investigators or co-principal investigators in peer reviewed VHA, National Institute of Health (NIH), or comparably rigorous intramural or extramurally funded research programs, and may serve as investigators on small or unfunded projects of limited complexity or scope. At this grade level, research audiologists have responsibility for conducting research under the general administrative direction of principal investigators or co-principal investigators of higher grade levels. Research audiologists at this grade level may have authored one or more publications, or presented research findings at a national meeting and may have earned an academic appointment at an affiliated medical school or local university, usually at the rank of instructor, lecturer, or equivalent.

a. Demonstrated Knowledge, Skills, and Abilities. In addition to the KSAs required in 1.a. above, the following are required:

- (1) Ability to execute research independently; and
- (2) Knowledge of clinical and research literature.

**PART II
APPENDIX G29****(4) GS-13**

(a) **Licensure.** For those grades that require licensure (GS-12 and above), within 2 years of initial appointment under this standard the incumbent must hold a full, current, and unrestricted license in a State, Territory, Commonwealth, or the District of Columbia. A staff audiologist who fails to obtain licensure within 2 years of initial appointment under this standard will be terminated.

(b) **Education and Experience.** Completion of 1 year of professional experience equivalent to the next lower grade level directly related to the position being filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs as indicated by an asterisk (*):

(c) **Assignments.** 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. Generally, non-supervisory assignments at this grade level require the knowledge, skills, and competencies normally acquired through a doctoral training program. Audiologists at this grade may be appointed to one of the following assignments:

1. Staff Audiologist (Advanced Practice Audiologist). Audiologists at this grade level are advanced practice independent licensed practitioners and must demonstrate ability to apply advanced audiologic knowledge, theories, and techniques to a full range of complex patient populations. They apply advanced clinical skills such as hearing conservation, advanced audiologic and electrophysiologic assessment and interpretation, comprehensive tinnitus evaluation, treatment, and retraining therapies, advanced central auditory function assessment and treatment, assessment and treatment of patients with surgically-implanted bio-electric or cochlear implants, intraoperative (surgical) monitoring, advanced vestibular assessment and rehabilitation, and analysis and fitting of advanced amplification technology involving acoustic signal processing algorithms.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Advanced knowledge of anatomy, physiology, acoustics, applied acoustics, communication, psychoacoustics, and auditory and vestibular pathophysiology;

(2) Advanced skill to perform and interpret diagnostic and electrophysiologic tests to a full range of patient populations;

(3) Advanced skill to provide treatment interventions including analysis and fitting of advanced amplification technology and signal processing algorithms to a full range of patient populations;

(4) Knowledge of embryology, genetics, pharmacology, ethics, compliance, and biostatistics; and

(5) Advanced knowledge of, and ability to perform, functions associated with contemporary audiology scope of practice.

2. Audiologist Program Manager. Audiologist program managers are responsible for providing comprehensive clinical services as well as ensuring that the work assignments of the other members of

the clinical team are carried out by performing a range of duties such as distributing and balancing workload among employees in accordance with established work flow or job specialization; assuring timely accomplishment of the assigned workload; assessing the status, quality, and progress of work, making day-to-day adjustments in accordance with established priorities; obtaining assistance from supervisors or managers on problems that may arise. In the absence of a supervisory audiologist, audiologist program managers oversee the professional practice of peers.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of contemporary audiology practice;

(2) Ability to articulate and communicate the assignment, project, problem to be solved, actionable events, and objectives; as well as advise on work methods, practices and procedures;

(3) Ability to apply appropriate problem solving methods and techniques;

*(4) Ability to monitor and report on the status and progress of work, evaluate program quality to ensure that methods, deadlines and quality have been met; and make adjustments to accomplish the workload in accordance with established priorities; and

(5) Ability to serve as facilitator and/or negotiator in coordinating initiatives and consensus building activities among clinical team members with widely divergent backgrounds, interests, and points of view.

3. Supervisory Audiologist or Section Chief. Supervisory audiologists or section chiefs exercise supervision, administrative management and direction of the audiology program in a unified audiology and speech-language pathology service or equivalent service-level department. They have responsibility for general or technical supervision of key clinical or training programs and overall technical and administrative oversight of audiologists depending on grade level. Supervisory audiologists or section chiefs develop, organize, direct, manage, supervise, control, and implement policies and procedures in focused clinical programs. They plan, assess, and evaluate programs to ensure proper coordination between care delivery within the section and the overall delivery of health care. They make decisions that affect staff and other resources associated with the section and are made with wide latitude of control and independent judgment. They exercise supervisory responsibilities such as planning and scheduling work; assigning work to employees; accepting, amending or rejecting completed work; assuring that production and accuracy requirements are met; appraising performance and recommending performance standards and ratings; assigning delineated clinical privileges; approving leave; and effecting disciplinary measures.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Ability to balance responsibilities and to work with great autonomy;

(2) Ability to set priorities and delegate tasks, meet multiple deadlines, analyze organizational problems and develop and implement effective solutions;

*(3) Ability to analyze and use data effectively to manage workload, quality, performance, and productivity within the section;

**PART II
APPENDIX G29**

(4) Skill in interpersonal relationships in dealing with employees, team leaders, and managers;

(5) Knowledge of, and ability to utilize, evidence-based practices and clinical practice guidelines in a professional area, and to guide the section staff in applying these tools;

*(6) Ability to analyze organizational and operational problems and to develop and implement solutions that result in efficient section operation;

(7) Skill in problem solving and conflict resolution; and

(8) Skill in the application and analysis of scientific and clinical literature in a professional area.

4. Assistant Chief. Assistant chiefs serve as full assistants to service chiefs, department heads, or persons of similar organizational rank in large, complex, or multi-division facilities and share a full scope of delegated managerial responsibilities. Assistant chiefs share full responsibility for all professional areas in a service-level department with the service chief. Assistant chiefs exercise supervision, administrative management, and direction of both professional areas in a unified audiology and speech-language pathology service or equivalent service-level department. Assistant chiefs have responsibility for general or technical supervision of key clinical or training programs within the service, and overall technical and administrative oversight of audiologists.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Ability to supervise, motivate, and manage effectively a diverse clinical staff;

*(2) Skill in assessing qualifications and abilities of current and prospective employees;

(3) Ability to develop productivity standards applicable to a service or equivalent organizational department;

*(4) Ability to organize work, set priorities, delegate tasks and responsibilities, and meet multiple deadlines for service; and

(5) Ability to accommodate new and changing work conditions, staffing, and contingencies.

5. Service Chiefs. Service chiefs at this grade level have overall responsibility for a service-level department, or its organizational equivalent in small and mid-sized facilities. These individuals have responsibility for general supervision of clinical and/or training programs, and overall technical and administrative oversight for operations within the service. Service chiefs develop, organize, direct, manage, supervise, control, and implement policies and procedures for complex service-level departments. They have overall responsibility for planning, assessing, and evaluating programs to ensure proper coordination between care delivered by the service and the overall delivery of health care within the facility. Service chiefs make decisions that affect subordinate section or assistant chiefs (if applicable), clinical, and clerical staff, and other resources associated with the department and are made with great autonomy. Their responsibilities may include full responsibility for developing and directing educational and training programs; negotiating affiliation agreements with academic partners; and responsibilities to subordinate

section or assistant chiefs (if applicable), planning, and scheduling work; assigning work to employees; accepting, amending or rejecting completed work; assuring that production and accuracy requirements are met; appraising performance and recommending performance standards and ratings; assigning delineated clinical privileges; approving leave; and effecting all levels of disciplinary measures. Service chiefs exercise supervision, administrative management and direction of both professional areas in a unified audiology and speech-language pathology service or equivalent service-level department, or administrative management and program direction of other rehabilitation-related areas.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Ability to supervise, motivate, and manage effectively a diverse clinical staff applicable to service-level departments in small or mid-sized facilities;

*(2) Skill in assessing qualifications and abilities of current and prospective employees;

(3) Ability to establish and monitor productivity standards and production and performance priorities;

*(4) Knowledge of, and ability to apply, administrative and human resources policies effectively;

(5) Ability to organize work, set priorities, delegate tasks, and manage and direct the work of others to accomplish program goals and missions;

(6) Ability to accommodate to new and changing work conditions and contingencies, and staffing;

(7) Ability to translate management goals and objectives into well-coordinated and controlled work operations; and

*(8) Knowledge of, and ability to manage, budgets for a service-level department in a small or mid-sized facility.

6. Research Audiologist. Research audiologists at this grade level are actively involved as principal investigators or co-principal investigators in peer reviewed VA, NIH, or comparably rigorous intramural or extramurally funded research programs. At this grade level, research audiologists have responsibility for formulating or conducting research on problems of considerable scope and complexity. Research audiologists at this grade level work with substantial freedom in identifying, defining, and selecting problems for study. At this grade level, research audiologists are mature, competent, and productive workers. They have typically authored one or more publications of considerable interest in the peer-reviewed literature; demonstrated a consistent record of presentation of findings at national scientific meetings; may have earned an academic appointment at the affiliated medical school or local university, usually at the rank of assistant professor or equivalent; and have responsibility for funded research projects.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of, and ability to apply, advanced scientific methods in the design and execution of creative and innovative research;

(2) Ability to convey scientific concepts and methodological principles to individuals with diverse levels of technical expertise;

(3) Ability to apply advanced theories and techniques; and

(4) Advanced knowledge of contemporary audiology practice and related disciplines.

7. Special Clinical Program Responsibilities. Audiologists with special clinical program responsibilities, e.g. inter-disciplinary teams or highly specialized clinical programs or subunits such as hearing conservation program, tinnitus management, program management of patients with bio-electric or cochlear implants, intraoperative (surgical) monitoring, advanced vestibular assessment and rehabilitation, or advanced analysis of acoustic signal processing algorithms, in combination with professional accomplishments, performance, and qualifications, may be appointed at the GS-13 grade level. Examples of professional accomplishments may include authorship of publications; presentations at national professional meetings; or other scholarly works; or specialty or board certifications.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Advanced knowledge in a focused area of contemporary audiology practice;

(2) Ability to articulate and communicate goals, objectives, and focused initiatives to an inter-disciplinary team, specialized clinical program, or subunit; as well as guiding the team members on work methods, practices and procedures;

(3) Ability to monitor and evaluate the work of an inter-disciplinary team, specialized clinical program, or subunit; and to make adjustments in procedures or practices to accomplish the program goals; and

(4) Ability to serve as coach and facilitator in coordinating program or team initiatives and consensus building activities among clinical team members with widely divergent backgrounds, interests, and points of view.

(5) **GS-14**

(a) **Licensure.** For those grades that require licensure (GS-12 and above), within 2 years of initial appointment under this standard the incumbent must hold a full, current, and unrestricted license in a State, Territory, Commonwealth, or the District of Columbia. A staff audiologist who fails to obtain licensure within 2 years of initial appointment under this standard will be terminated.

(b) **Education and Experience.** Completion of 1 year of professional experience equivalent to the next lower grade level directly related to the position being filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs as indicated by an asterisk (*):

(c) **Assignments.** 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. Audiologists in this grade level demonstrate exceptional achievement, professional competence, and leadership and may be appointed to one of the following assignments:

1. Service Chief. Service chiefs have broad and overall responsibility for a service-level department, or its organizational equivalent in large, complex, or multi-division facilities. They manage substantive parts of medical centers that deliver specialized, complex, professional services, and significantly impact the care provided to veterans. These individuals have responsibility for general supervision of clinical and/or training programs, and overall technical and administrative oversight for operations within the service. Service chiefs develop, organize, direct, manage, supervise, control, and implement policies and procedures for complex service-level departments. They have overall responsibility for planning, assessing, and evaluating programs to ensure proper coordination between care delivered by the service and the overall delivery of health care within the facility. Service chiefs make decisions that affect subordinate section or assistant chiefs (if applicable), clinical, and clerical staff, and other resources associated with the department and are made with great autonomy. Their responsibilities may include full responsibility for developing and directing educational and training programs; negotiating affiliation agreements with academic partners; and setting training objectives; delegating responsibilities to subordinate section or assistant chiefs (if applicable), planning, and scheduling work; assigning work to employees; accepting, amending or rejecting completed work; assuring that production and accuracy requirements are met; appraising performance and recommending performance standards and ratings; assigning delineated clinical privileges; approving leave; and effecting all levels of disciplinary measures. Service chiefs exercise supervision, administrative management and direction of both professional areas in a unified audiology and speech-language pathology service or equivalent service-level department, or administrative management and program direction of other rehabilitation-related areas.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Ability to supervise, motivate, and manage effectively a diverse clinical staff applicable to a service-level department in large, complex, or multi-division facility;

*(2) Skill in assessing qualifications and abilities of current and prospective employees;

(3) Ability to establish and monitor productivity standards and production and performance priorities;

(4) Ability to organize work, set priorities, delegate tasks and responsibilities;

(5) Ability to manage and direct the work of others to accomplish program goals and missions;

(6) Ability to accommodate to new and changing work conditions and contingencies, and staffing; and

(7) Ability to translate management goals and objectives into well-coordinated and controlled work operations.

2. Program Manager. Program managers have overall responsibility for management and direction of large, geographically-separated, integrated health care facilities or a Network; planning, coordinating, and evaluating complex interdisciplinary services across the full continuum of care including not only audiology but also other focused rehabilitation, ancillary, or other health care services. In the absence of a supervisory audiologist, this assignment is responsible for oversight of clinical competence and performance of peers.

a. Demonstrated Knowledge, Skills, and Abilities

**PART II
APPENDIX G29**

*(1) Skill in managing and directing diverse work to include setting priorities and delegating tasks, meeting multiple deadlines, analyzing complex organizational problems in order to develop and implement effective solutions;

(2) Ability to balance responsibilities applicable to a large service-level or multi-service, and multi-disciplinary, organizational environment and to work with great autonomy;

(3) Skill in interpersonal relationships in dealing with a diverse range of employees, team leaders, and managers;

(4) Advanced knowledge of, and ability to utilize, evidence-based practices and clinical practice guidelines in multiple professional areas, and to guide the program staff in applying these tools; and

(5) Skill in problem solving and conflict resolution; and

*(6) Knowledge of, and ability to manage, budgets for a large, integrated services including not only audiology, but also other focused rehabilitation, ancillary, or other health care services.

3. Research Audiologist. At this grade level, they are actively involved as principal investigators or co-principal investigators in peer reviewed VA, NIH, or comparably rigorous intramural or extramurally funded research programs. They are involved in peer review activities for VHA and non-VHA research, e.g., grant review for VHA or NIH proposals, local research service committees, e.g., Research and Development (R&D), Health Services Research and Development (HSR&D), Institutional Review Board (IRB), etc., or serve as consulting editors for peer-reviewed journals. At this grade level, research audiologists have responsibility for formulating and guiding research on problems that are difficult to define or require unconventional or novel approaches, or sophisticated research methods. Research audiologists at this grade level have achieved significant professional recognition by making scientific contributions to research with potential for significant impact in audiology, hearing science, or related disciplines. They have typically authored one or more publications of considerable interest and value to the field in the peer-reviewed professional literature; have a consistent record of presentation of findings at national scientific meetings; may have earned an academic appointment at an affiliated medical school or local university, usually at the rank of associate professor or equivalent; and have and responsibility for funded research projects.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of and ability to apply advanced scientific methods in the design and execution of highly creative, innovative, or complex research;

(2) Ability to lead and motivate a research team with diverse backgrounds, research interests, and points of view;

*(3) Ability to manage large research budgets;

(4) Knowledge of, and ability to evaluate critically, the research of others in peer review or editorial settings;

- (5) Ability to convey scientific concepts and methodological principles to individuals with diverse levels of technical expertise;
- (6) Ability to apply advanced theories and techniques, demonstrating exceptional depth of knowledge of clinical research literature;
- (7) Advanced knowledge of contemporary audiology practice and related disciplines;
- (8) Advanced knowledge of anatomy, physiology, acoustics, applied acoustics, communication, neuroscience, psychoacoustics, and auditory/vestibular pathophysiology; and
- (9) Advanced knowledge of normal and abnormal auditory and balance function.

4. DEVIATIONS

- a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for audiologists in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements of the proposed grade.
- b. Under no circumstances will the educational or licensure requirements be waived, except as provided in paragraph 2c above.
- c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

**APPENDIX G30. SPEECH-LANGUAGE PATHOLOGIST QUALIFICATION STANDARD
GS-665****Veterans Health Administration**

1. COVERAGE. The following are requirements for appointment as a Speech-Language Pathologist (S-LP) in the Veterans Health Administration (VHA). These requirements apply to all VHA S-LPs in the General Schedule (GS)-665 series, including those assigned to medical centers, clinics, domiciliaries, nursing care facilities, community care settings, Community-Based Outpatient Clinics, Veteran Outreach Centers, Veterans Integrated Service Network (VISN) offices, and VHA Central Office. In performing these duties, VHA S-LPs demonstrate professional knowledge of, and skill in applying, a wide range of theories, principles, and methodology of the practice of speech-language pathology.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified candidates in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Education.** A master's degree or its equivalent in speech-language pathology, communication disorders, or a directly related field from an accredited college or university. "Accredited" means a college or university accredited by a regional accreditation organization and a speech-language pathology academic program accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (ASHA).

c. **Licensure.** For those grades that require licensure (GS-12 and above), within 2 years of initial appointment under this standard the incumbent must hold a full, current, and unrestricted license in a State, Territory, Commonwealth, or the District of Columbia. A staff S-LP who fails to obtain licensure within 2 years of initial appointment under this standard will be terminated.

NOTE: The S-LP must maintain full, current, and unrestricted licensure/registration.

(1) Non-licensed applicants who otherwise meet the eligibility requirements for S-LP licensure may be given a temporary appointment as a graduate S-LP under the authority of 38 U.S.C. § 7405 (a) (1) (D). Failure to obtain licensure during that period is justification for termination of the temporary appointment. This may result in termination of employment.

d. **Loss of Credential.** An employee in this occupation who fails to obtain licensure/certification/registration within the required time frame, or who fails to maintain the required licensure/certification/registration must be removed from the occupation, which may also result in termination of employment.

For occupations which require an active credential (licensure/certification/registration) at all grade levels, at the discretion of the appointing official, an employee may be reassigned to another occupation for which he/she qualifies if a placement opportunity exists. For occupations which require an active credential (licensure/certification/registration) in assignments above the full-performance level only, at the discretion of the appointing official, an employee may remain at an appropriate lower grade level in the occupation when both of the following apply: the credential is not a requirement and a placement opportunity exists.

**PART II
APPENDIX G30**

e. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

f. **Physical Requirements.** See VA Directive and Handbook 5019.

g. **English Language Proficiency.** Speech-language pathologists must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS**a. Definitions****(1) Creditable Experience**

(a) **Knowledge of Contemporary Professional Speech-Language Pathology Practice.** To be creditable, the experience must have required the use of knowledge, skills, abilities, and other characteristics (also referred to as “core competencies”) associated with contemporary professional speech-language pathology practice. This knowledge may be evidenced by one or more of the following:

1. At least 1 year of active professional practice or its equivalent. Active professional practice means paid or non-paid employment as a professional S-LP engaged in the practice of speech-language pathology as defined by the appropriate licensing board.
2. Academic course work leading to a doctoral degree in speech-language pathology, communication disorders and sciences, or a related field.

(b) **Quality of Experience.** Experience is only creditable if it is both of the following:

1. Work as a professional speech-language pathologist related to the position to be filled; and
2. The work is at a level comparable to speech-language pathology experience at the next lower grade level.

(c) **Part-Time Experience.** Part-time experience as a professional speech-language pathologist is credited according to its relationship to the full-time work week. For example, a speech-language pathologist employed 20 hours a week, or on a 1/2-time basis, would receive 1 full-time workweek of credit for each 2 weeks of service.

b. **Grade Determinations.** In addition to the basic requirements, the following criteria must be met when determining the grade of candidates.

(1) **GS-9**

(a) **Education and Experience.** None beyond the basic requirements.

(b) **Assignment.** Employees at this level serve in a speech-language pathologist career development position.

(2) **GS-11**

(a) **Education and Experience.** Completion of 1 year of professional experience as an S-LP equivalent to the next lower level, 3 years of progressively higher level graduate education leading to a doctoral degree, or doctoral degree in speech-language pathology, communication disorders, or a directly related field. For positions involved in research S-LP assignments involving no direct patient care, no additional education or professional experience is required beyond those identified at the GS-9 level. In addition, the candidate must demonstrate the following KSAs:

(b) **Assignments.** Speech-language pathologists at this grade level may be appointed to one of the following assignments:

**PART II
APPENDIX G30**

1. Staff Speech-Language Pathologist. Staff S-LPs at this grade level provide assessment and treatment intervention. If unlicensed, the individual must function under the supervision of a licensed S-LP.

a. Demonstrated Knowledge, Skills, and Abilities

- (1) Knowledge of principles and techniques used in speech pathology;
- (2) Ability to evaluate and interpret data;
- (3) Ability to communicate information effectively to patients and significant others;
- (4) Ability to communicate effectively verbally and in writing;
- (5) Ability to function as a constructive member of a team;
- (6) Knowledge of principles and techniques in diagnosis and treatment of dysphagia;
- (7) Knowledge of, and ability to develop and implement, comprehensive treatment plans.

2. Research Speech-Language Pathologist. Research S-LPs at this grade level serve as research assistants conducting research under the direct supervision of principal investigators or co-principal investigators of higher-grade levels.

a. Demonstrated Knowledge, Skills, and Abilities. In addition to the KSAs in 1.a. above, the following KSAs are required:

- (1) Knowledge of, and ability to apply, appropriate basic scientific methods, basic research design, and statistics;
- (2) Project-specific knowledge of coinical and research literature; and
- (3) Knowledge of anatomy and physiology of speech, language, voice, swallowing, applied acoustics, and project-specific knowledge of clinical and research literature.

(3) GS-12

(a) **Licensure.** For those grades that require licensure (GS-12 and above), within 2 years of initial appointment under this standard the incumbent must hold a full, current, and unrestricted license in a State, Territory, Commonwealth, or the District of Columbia. A staff S-LP who fails to obtain licensure within 2 years of initial appointment under this standard will be terminated.

(b) **Education and Experience.** In addition to the requirements at the GS-11 level, completion of 1 year of professional experience comparable to the next lower level and possession of a full, current, and unrestricted license to practice speech-language pathology. For positions engaged in research S-LP

assignments involving no direct patient care, completion of a doctoral degree in speech-language pathology, communication disorders, or a related field is fully qualifying. In addition, the candidate must demonstrate the following KSAs:

(c) **Assignments.** Speech-language pathologists at this grade level are considered to be at the full performance level and may be appointed to one of the following assignments:

1. Staff Speech-Language Pathologist. Staff S-LPs at this grade level must demonstrate professional knowledge of, and skill in applying, a wide range of theories, principles, and methodologies of the practice of speech-language pathology to a wide range of populations.

a. Demonstrated Knowledge, Skills, and Abilities

- (1) Ability to develop coherent treatment strategies;
- (2) Ability to incorporate new clinical procedures sufficient to perform clinical services independently;
- (3) Ability to conduct assessments, provide treatment interventions, and provide consultation to other health care professionals;
- (4) Knowledge of instrumentation used in speech-language pathology;
- (5) Knowledge of principles and techniques used in alternative and augmentative communication (AAC) systems, diagnosis and treatment of dysphagia, and cognitive-communication disorders;
- (6) Knowledge of principles and techniques used in voice disorders including alaryngeal and trach/ventilator-dependent patients; and
- (7) Ability to perform functions associated with contemporary speech-language pathology practice.

2. Research Speech-Language Pathologist. Research S-LPs at this grade level assist principal investigators or co-principal investigators in peer reviewed VHA, National Institutes of Health (NIH), or comparably rigorous intramural or extramurally funded research programs, and may serve as investigators on small or unfunded projects of limited complexity or scope. At this grade level, research S-LPs have responsibility for conducting research under the general supervision of principal investigators or co-principal investigators of higher-grade levels. Research S-LPs at this grade level may have authored one or more publications or presented research findings at a national meeting and may have earned academic appointment at an affiliated medical school or local university, usually at the rank of instructor, lecturer, or equivalent.

a. Demonstrated Knowledge, Skills, and Abilities. In addition to the KSAs in 1.a. above, the following KSAs are required:

- (1) Ability to execute research independently; and
- (2) Knowledge of clinical and research literature.

**PART II
APPENDIX G30****(4) GS-13**

(a) **Licensure.** For those grades that require licensure (GS-12 and above), within 2 years of initial appointment under this standard the incumbent must hold a full, current, and unrestricted license in a State, Territory, Commonwealth, or the District of Columbia. A staff S-LP who fails to obtain licensure within 2 years of initial appointment under this standard will be terminated.

(b) **Education and Experience.** Completion of 1 year of experience equivalent to the next lower grade level directly related to the position being filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(c) **Assignments.** 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. Speech-language pathologists at this grade level may be appointed to one of the following assignments:

1. Speech-Language Pathologist Program Manager. Speech-language pathologist program managers are responsible for providing comprehensive clinical services as well as ensuring that the work assignments of the other members of the clinical team are carried out by performing a range of duties such as distributing and balancing workload among employees in accordance with established work flow or job specialization; assuring timely accomplishment of the assigned workload; assessing the status, quality, and progress of work; making day-to-day adjustments in accordance with established priorities; obtaining assistance from supervisors or managers on problems that may arise. In the absence of a supervisory speech-language pathologist, will oversee the professional practice of peers.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of contemporary speech-language pathology practice;

(2) Ability to articulate and communicate to the clinical team the assignment, project, problem to be solved, actionable events, and objectives, as well as advise on work methods, practices, and procedures.

(3) Ability to coach the clinical team in the selection and application of appropriate problem solving methods and techniques;

(4) Ability to monitor and report on the status and progress of work, evaluate program quality to ensure that methods, deadlines, and quality have been met; and make adjustments to accomplish the workload in accordance with established priorities; and

(5) Ability to serve as coach, facilitator, and/or negotiator in coordinating team initiatives and consensus building activities among clinical team members with widely divergent backgrounds, interests, and points of view.

2. Supervisory Speech-Language Pathologist or Section Chief. Supervisory S-LPs or section chiefs exercise supervision, administrative management, and direction of the speech-language pathology program

in a unified audiology and speech-language pathology service or equivalent service-level department. They have responsibility for general or technical supervision of key clinical or training programs and overall technical and administrative oversight of S-LPs depending on grade level. They develop, organize, direct, manage, supervise, control, and implement policies and procedures in focused clinical programs and plan, assess, and evaluate programs to ensure proper coordination between care delivery within the section and the overall delivery of health care. They make decisions that affect staff and other resources associated with the section with wide latitude of control and independent judgment. They exercise supervisory responsibilities such as planning and scheduling work; assigning work to employees; accepting, amending or rejecting completed work; ensuring that production and accuracy requirements are met; appraising performance and recommending performance standards and ratings; assigning delineated clinical privileges; approving leave; and effecting disciplinary measures.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Ability to balance responsibilities and to work with great autonomy;

*(2) Ability to set priorities, delegate tasks, meet multiple deadlines, analyze organizational problems, and develop and implement effective solutions;

*(3) Ability to analyze and use data effectively to manage workload, quality, performance, and productivity within the section;

(4) Skill in interpersonal relationships in dealing with employees, team leaders, and managers;

(5) Knowledge of, and ability to utilize, evidence-based practices and clinical practice guidelines in a professional area, and to guide the section staff in applying these tools;

(6) Ability to analyze organizational and operational problems and to develop and implement solutions that result in efficient section operation;

(7) Skill in problem solving and conflict resolution; and

(8) Skill in the application and analysis of scientific and clinical literature in a professional area.

3. Assistant Chief. Assistant chiefs serve as full assistants to service chiefs, department heads, or persons of similar organizational rank, and share a full scope of delegated managerial responsibilities. Assistant chiefs share full responsibility for all professional areas in a service-level department with the service chief. Assistant chiefs exercise supervision, administrative management, and direction of both professional areas in a unified audiology and speech-language pathology service or equivalent service-level department. Assistant chiefs have responsibility for general or technical supervision of key clinical or training programs within the service, and overall technical and administrative oversight of S-LPs.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Ability to supervise, motivate, and manage effectively a diverse clinical staff;

**PART II
APPENDIX G30**

*(2) Skill in assessing qualifications and abilities of current and prospective employees;

(3) Ability to develop productivity standards applicable to a service or equivalent organizational department;

(4) Ability to organize work, set priorities, delegate tasks and responsibilities, and meet multiple deadlines for the service; and

(5) Ability to adapt to new and changing work conditions, staffing, and contingencies.

4. Service Chief. Service chiefs at this grade level have overall responsibility for a service-level department, or its organizational equivalent in small or mid-sized facilities. These individuals have responsibility for general supervision of clinical and/or training programs, and overall technical and administrative oversight for operations within the service. Service chiefs develop, organize, direct, manage, supervise, control, and implement policies and procedures for complex service-level departments. They have overall responsibility for planning, assessing, and evaluating programs to ensure proper coordination between care delivered by the service and the overall delivery of health care within the facility. Service chiefs make decisions that affect section or assistant chiefs (if applicable), clinical and clerical staff, and other resources associated with the department with great autonomy. Their responsibilities may include full responsibility for developing and directing educational and training programs; negotiating affiliation agreements with academic partners; setting training objectives; delegating responsibilities to subordinate section or assistant chiefs (if applicable); planning, and scheduling work; assigning work to employees; accepting, amending, or rejecting completed work; assuring that production and accuracy requirements are met; appraising performance and recommending performance standards and ratings; assigning delineated clinical privileges; approving leave; and effecting all levels of disciplinary measures. Service chiefs exercise supervision, administrative management, and direction of both professional areas in a unified audiology and speech-language pathology service or equivalent service-level department in other rehabilitation areas.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Ability to supervise, motivate, and manage effectively a diverse clinical staff applicable to a service-level department in small or mid-sized facilities;

*(2) Skill in assessing qualifications and abilities of current and prospective employees;

(3) Ability to establish and monitor productivity standards and production and performance priorities;

(4) Comprehensive knowledge of, and ability to, apply administrative and human resources policies effectively;

(5) Demonstrated ability to organize work, set priorities, delegate tasks and responsibilities, and manage and direct the work of others to accomplish program goals and missions;

(6) Ability to adapt to new and changing work conditions, contingencies, and staffing;

(7) Ability to translate management goals and objectives into well-coordinated and controlled service operations; and

(8) Knowledge of, and ability to manage, budgets for a service-level department in a small or mid-sized facility.

5. Research Speech-Language Pathologist. Research S-LPs at this grade level are actively involved as principal investigators or co-principal investigators in peer reviewed VHA, NIH, or comparably rigorous intramural or extramurally funded research programs. Responsibilities may include peer review activities for VA and non-VA research, e.g., grant review for VA or NIH proposals or local research service committees, e.g., Research and Development (R&D), Health Services Research and Development (HSR&D), Institutional Review Board (IRB), etc. At this grade level, research S-LPs have responsibility for formulating or conducting research on problems of considerable scope and complexity. Researchers at this grade level work with substantial freedom in identifying, defining, and selecting problems for study. They typically will have authored one or more publications in peer-reviewed literature; demonstrated a consistent record of presentation of findings at national scientific meetings; may have earned an academic appointment at an affiliated medical school or local university, usually at the rank of Assistant Professor or equivalent; and have responsibility for funded research projects.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of, and ability to apply, advanced scientific methods in the design and execution of creative and innovative research;

(2) Ability to convey scientific concepts and methodological principles to individuals with diverse levels of technical expertise;

(3) Ability to apply advanced theories and techniques; and

(4) Advanced knowledge of contemporary speech-language pathology and related disciplines.

6. Special Clinical Program Responsibilities. Speech-language pathologists with special clinical program responsibilities, e.g., inter-disciplinary teams or highly specialized clinical programs or clinical subunits such as dysphagia, traumatic brain injury, nursing home care, stroke management, spinal cord injury, or head/neck cancer program, in combination with professional accomplishments, performance, and qualifications, may be appointed to the GS-13 grade level. Examples of professional accomplishments may include attainment of advanced degrees, contributions resulting in publications, presentations at national professional meetings, or other scholarly works, or specialty or board certification, e.g., Board Certification in neurologic communication disorders by the Academy of Neurologic Communication Disorders and Sciences (BC-NCD), or ASHA specialty certification. Typically, S-LPs with these responsibilities apply advanced theories and techniques to special patient populations, provide professional advice and counseling, and provide consultation in specialized areas of speech-language pathology. They manage complex and difficult patients with multiple physical, sensory, motor, cognitive, or other issues that complicate communication or swallowing status, and involve multiple clinical management options, difficult clinical decision making, complex data, and high risk of complications, morbidity, or mortality, e.g.,

**PART II
APPENDIX G30**

tracheoesophageal voice prostheses and laryngectomy tubes, ventilator-dependent and tracheostomized patients with speaking valves, and those receiving poly-pharmacology impacting on communication.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Advanced knowledge in a focused area of contemporary speech-language pathology practice;

(2) Ability to articulate and communicate goals, objectives, and focused initiatives to an inter-disciplinary team, specialized clinical program, or subunit; as well as guiding the team members on work methods, practices, and procedures;

*(3) Ability to monitor and evaluate the work of an inter-disciplinary team, specialized clinical program, or subunit; and to make adjustments in procedures or practices to accomplish the program goals; and

(4) Ability to serve as coach and facilitator in coordinating program or team initiatives and consensus building activities among clinical team members with widely divergent backgrounds, interests, and points of view.

(5) GS-14

(a) **Licensure.** For those grades that require licensure (GS-12 and above), within 2 years of initial appointment under this standard the incumbent must hold a full, current, and unrestricted license in a State, Territory, Commonwealth, or the District of Columbia. A staff S-LP who fails to obtain licensure within 2 years of initial appointment under this standard will be terminated.

(b) **Education and Experience.** Completion of 1 year of experience equivalent to the next lower grade level directly related to the position being filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(c) **Assignments.** 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. Speech-language pathologists at this grade level demonstrate exceptional achievement, professional competence, and leadership and may be appointed to one of the following assignments:

1. Service Chief. Service chiefs have broad and overall responsibility for a service-level department, or its organizational equivalent. They manage substantive parts of medical centers that deliver specialized, complex, professional services, and significantly impact the care provided to veterans. They have responsibility for general supervision of clinical and/or training programs, and overall technical and administrative oversight for operations within the service. Service chiefs develop, organize, direct, manage, supervise, control, and implement policies and procedures for complex service-level departments. They have overall responsibility for planning, assessing, and evaluating programs to ensure proper coordination between care delivered by the service and the overall delivery of health care within the facility. Service chiefs make decisions that affect section or assistant chiefs (if applicable), clinical and clerical staff, and other resources associated with the department with great autonomy. Their responsibilities may include full

responsibility for developing and directing educational and training programs; negotiating affiliation agreements with academic partners; setting training objectives; delegating responsibilities to subordinate section or assistant chiefs (if applicable); planning, and scheduling work; assigning work to employees; accepting, amending, or rejecting completed work; assuring that production and accuracy requirements are met; appraising performance and recommending performance standards and ratings; assigning delineated clinical privileges; approving leave; and effecting all levels of disciplinary measures. Service chiefs exercise supervision, administrative management, and direction of both professional areas in a unified audiology and speech-language pathology service or equivalent service-level department in other rehabilitation areas.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Ability to supervise, motivate, and manage effectively a diverse clinical staff applicable to a service-level department in a large, complex, or multi-division facility;

*(2) Skill in assessing qualifications and abilities of current and prospective employees;

(3) Ability to establish and monitor productivity standards and production and performance priorities;

(4) Ability to organize work, set priorities, delegate tasks and responsibilities;

(5) Ability to manage and direct the work of others to accomplish program goals and missions;

(6) Ability to accommodate to new and changing work conditions and contingencies, staffing; and

(7) Ability to translate management goals and objectives into well-coordinated and controlled service operations.

2. Assistant Program Manager. Assistant program managers have overall responsibility for management and direction of large, geographically-separated, integrated health care facilities or a Network; planning, coordinating, and evaluating complex inter-disciplinary services across the full continuum of care including not only speech-language pathology but also other focused rehabilitation, ancillary, or other health care services. In the absence of a supervisory speech-language pathologist, this assignment is responsible for oversight of clinical competence and performance of peers.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Skill in managing and directing work to include setting priorities and delegating tasks, meeting multiple deadlines, analyzing complex organizational problems in order to develop and implement effective solutions;

(2) Ability to balance responsibilities applicable to a large service-level or multi-service organizational environment and to work with great autonomy;

(3) Skill in interpersonal relationships in dealing with employees, team leaders, and managers;

**PART II
APPENDIX G30**

(4) Advanced knowledge of and ability to utilize evidence-based practices and clinical practice guidelines in multiple professional areas, and to guide the program staff in applying these tools; and

(5) Skill in problem solving and conflict resolution.

(6) Knowledge of, and ability to manage, budgets for a large, integrated services including not only speech-language pathology but also other focused rehabilitation, ancillary, or other health care services.

3. Research Speech-Language Pathologist. At this level, research S-LPs are involved in peer review activities for VHA and non-VHA research, e.g., grant review for VHA or NIH proposals, local research service committees, e.g., R&D, HSR&D, IRB, etc., or serve as consulting editors for peer-reviewed journals. At this grade level, research S-LPs have responsibility for formulating and guiding research on problems that are difficult to define or require unconventional, novel approaches, or sophisticated research methods. Research S-LPs at this grade level have achieved significant professional recognition by making scientific contributions to research with potential for significant impact in speech-language pathology and related disciplines. They typically have authored one or more publications of considerable interest and value to the field in peer-reviewed professional literature; may have a consistent record of presentation of findings at national scientific meetings; have earned an academic appointment at an affiliated medical school or local university, usually at the rank of associate professor or equivalent; and have responsibility for funded research projects.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of, and ability to advance, scientific methods in the design and execution of highly creative, innovative, or complex research;

(2) Ability to lead and motivate a research team with diverse backgrounds, research interests, and points of view;

(3) Ability to manage large research budgets;

(4) Knowledge of, and ability to, evaluate critically the research of others in peer review or editorial settings;

(5) Ability to convey scientific concepts and methodological principles to individuals with diverse levels of technical expertise;

(6) Ability to apply advanced research theories and techniques, demonstrating exceptional depth of knowledge of clinical research literature;

(7) Advanced knowledge of contemporary speech-language pathology, neuroscience, and related disciplines;

(8) Advanced knowledge of anatomy and physiology of speech, language, voice, and swallowing, neuroanatomy, applied acoustics; and

- (9) Advanced knowledge of normal and abnormal communication and swallowing function.

4. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for S-LPs in VHA whose composite record of accomplishments performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements of the proposed grade.

b. Under no circumstances will the educational or licensure requirements be waived.

c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

**APPENDIX G31. AUDIOLOGIST/SPEECH-LANGUAGE PATHOLOGIST
QUALIFICATION STANDARD
GS-665
Veterans Health Administration**

1. COVERAGE. The following are requirements for appointment as an audiologist/speech-language pathologist (A/S-LP) in the Veterans Health Administration (VHA). These requirements apply to all VHA A/S-LPs in the General Schedule (GS)-665 series. VHA A/S-LPs provide clinical service to veterans and other VA beneficiaries in VA medical centers, clinics, domiciliaries, nursing care facilities, community care settings, Community-Based Outpatient Clinics, Veterans Outreach Centers, Veterans Integrated Service Network (VISN) offices, and VHA Central Office. In performing these duties, VHA A/S-LPs demonstrate professional knowledge of, and skill in applying, a wide range of theories, principles, and methodology in both the practice of audiology and speech-language pathology.

NOTE: Only those individuals who hold an “audiologist/speech-language pathologist” position title prior to the effective date of this standard are subject to the provisions of this standard. Initial appointments of new employees as an “audiologist/speech-language pathologist” will not be permitted. In unusual circumstances, A/S-LPs may be appointed or re-appointed under this standard using waiver procedures. See Section 4, Paragraph 4 “Deviations,” this part.

NOTE: Supervisory A/S-LPs will be appointed under either the Audiologist Qualification Standard or Speech-Language Pathologist Qualification Standard. The applicable qualification standard will depend on the position and the nature of the work. In cases where a supervisory A/S-LP has administrative or managerial responsibilities over both audiology and speech-language pathology areas, the applicable standard will be determined by (1) the qualifications of the person applying for the position, (2) the predominance of work in each area, and (3) the needs of the facility.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified citizens in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Education.** A master’s degree or its equivalent in audiology or hearing science from an accredited college or university; or, a master’s degree, or its equivalent, in speech-language pathology, communication sciences and disorders, or a related field, from an accredited college or university. “Accredited” means a college or university accredited by a regional accreditation organization and an audiology or speech-language pathology program accredited by the Council on Academic Accreditation of the American Speech-Language-Hearing Association (ASHA).

NOTE: Beginning on January 1, 2007, the Council on Academic Accreditation (CAA) in Audiology and Speech-Language Pathology of the ASHA will accredit only doctoral degree programs in audiology or hearing science.

c. **Licensure.** For those grades that require licensure (GS-12 and above), within 2 years of initial appointment under this standard, the incumbent must hold a full, current, and unrestricted license in both

areas in a State, Territory, Commonwealth, or the District of Columbia. An A/S-LP who fails to achieve licensure in one area within 2 years of initial appointment under this qualification standard will be restricted to duties in the licensed area.

(1) The A/S-LP must maintain full, current, and unrestricted licensure/registration.

(2) An A/S-LP who has, or has ever had, his/her audiology and/or speech pathology license revoked, suspended, denied, restricted, limited, or issued/placed in a probationary status may be appointed only in accordance with the provisions in Chapter 3, section B, paragraph 16 of this part.

(3) **Exception.** The requirement for licensure may be waived by the Under Secretary for Health or designee in VHA Central Office for individuals engaged in research or academic assignments involving no direct patient care duties, in accordance with current activities.

(4) **Loss of Credential.** An employee in this occupation who fails to obtain licensure/certification/registration within the required time frame, or who fails to maintain the required licensure/certification/registration must be removed from the occupation, which may also result in termination of employment.

For occupations which require an active credential (licensure/certification/registration) at all grade levels, at the discretion of the appointing official, an employee may be reassigned to another occupation for which he/she qualifies if a placement opportunity exists. For occupations which require an active credential (licensure/certification/registration) in assignments above the full-performance level only, at the discretion of the appointing official, an employee may remain at an appropriate lower grade level in the occupation when both of the following apply: the credential is not a requirement and a placement opportunity exists.

d. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

e. **Physical Requirements.** See VA Directive and Handbook 5019.

f. **English Language Proficiency.** A/S-LPs must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS

a. Definitions

(1) Creditable Experience

(a) **Knowledge of Contemporary Professional Audiology and Speech-Language Pathology Practices.** To be creditable, the experience must have required the use of knowledge, skills, abilities and other characteristics associated with contemporary professional audiology and speech-language pathology practice. This knowledge may be evidenced by one or more of the following:

1. At least 1 year of active professional practice or its equivalent. Active professional practice means paid or non-paid employment as a professional audiologist and speech-language pathologist engaged in the practice of audiology and speech-language pathology as defined by the appropriate licensing boards.

2. Academic course work leading to a doctoral degree in audiology, speech-language pathology, or directly related fields.

(b) **Quality of Experience.** Experience is creditable if it is both of the following:

1. Work as a professional audiologist and speech-language pathologist related to the position to be filled; and

2. The work is at a level comparable to audiology and speech-language pathology experience at the next lower grade level.

(c) **Part-Time Experience.** Part-time experience as a professional A/S-LP is credited according to its relationship to the full-time workweek. For example, an A/S-LP employed 20 hours a week, or on a 1/2-time basis, would receive 1 full-time work week of credit for each 2 weeks of service.

b. **Grade Determinations.** In addition to the basic requirements for employment, the following criteria must be met when determining grades.

(1) **GS-9**

(a) **Education and Experience.** None beyond the basic requirements.

(b) **Assignment.** Employees at this level serve in A/S-LP career development positions.

(2) **GS-11**

(a) **Education and Experience.** Completion of 1 year of professional experience as an A/S-LP equivalent to the next lower level; or 3 years of progressively higher level graduate education leading to a doctoral degree; or a doctoral degree in audiology or speech-language pathology, communication sciences and disorders, or a related field. For positions involved in research A/S-LP assignments involving no direct patient care, no additional education or professional experience is required beyond those identified at the GS-9 level. In addition, the candidate must demonstrate the following KSAs:

(b) **Assignments.** A/S-LPs at this grade level may be appointed to one of the following assignments:

1. Staff Audiologist/Speech Language Pathologist. Staff A/S-LPs at this grade level perform clinical assessment and treatment intervention. If unlicensed in either field, the individual must function under the supervision of a licensed A/S-LP, audiologist, or speech-language pathologist. If licensed in one field only, the A/S-LP must be supervised by a licensed A/S-LP or licensed audiologist or speech-language pathologist depending on the unlicensed specialty.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of contemporary audiology and speech-language pathology practice;

(2) Ability to communicate orally and in writing;

(3) Ability to communicate information effectively to patients, families, and other health care professionals;

(4) Knowledge of the principles and techniques in the assessment and treatment of auditory and balance disorders and the diagnosis and treatment of dysphagia;

(5) Knowledge of, and ability to develop and implement, comprehensive treatment plans; and

(6) Ability to function as a constructive member of a team.

2. Research Audiologist/Speech-Language Pathologist. Research A/S-LPs at this grade level serve as research assistants. At this grade level, research A/S-LPs conduct research under the direct supervision of principal investigators or co-principal investigators of higher grade level.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of, and ability to apply, appropriate basic scientific methods, basic research design, and statistics;

(2) Ability to communicate orally and in writing; and

(3) Knowledge of anatomy, physiology, acoustics, speech, language, voice, swallowing, communication, psychoacoustics, and auditory/vestibular pathophysiology, and project-specific knowledge of clinical and research literature.

(3) **GS-12**

(4) **Licensure.**

(a) For those grades that require licensure (GS-12 and above), within 2 years of initial appointment under this standard, the incumbent must hold a full, current, and unrestricted license in both areas in a State, Territory, Commonwealth, or the District of Columbia. An A/S-LP who fails to achieve licensure in one area within 2 years of initial appointment under this qualification standard will be restricted to duties in the licensed area.

(b) **Education and Experience.** In addition to the requirements at the GS-11 level, completion of 1 year of professional experience comparable to the next lower level and possession of a full, current, and unrestricted license to practice both audiology and speech-language pathology. For positions involved in research audiology/speech-language pathology assignments involving no direct patient care, completion of a doctoral degree in audiology, speech-language pathology, communication, hearing science, or a related field is fully qualifying. In addition, the candidate must demonstrate the following KSAs:

(c) **Assignments.** A/S-LPs at this grade level are considered to be at the full performance level and may be appointed to one of the following assignments:

1. Staff Audiologist/Speech-Language Pathologist. Staff A/S-LPs at this grade level must demonstrate professional knowledge of, and skill in applying, a wide range of theories, principles, and methodology of the practices of both audiology and speech-language pathology to a wide range of populations.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Ability to develop coherent treatment strategies;

(2) Ability to incorporate new clinical procedures sufficiently to perform clinical services independently;

(3) Ability to conduct assessments, provide treatment interventions; and provide consultation to other health care professionals;

(4) Knowledge of contemporary audiology and speech-language pathology practices; and

(5) Ability to perform functions associated with contemporary audiology and speech-language pathology scope of practice.

2. Research Audiologist/Speech-Language Pathologist. Research A/S-LPs at this grade level assist principal investigators or co-principal investigators in peer reviewed VA, National Institutes of Health (NIH), or comparably rigorous intramural or extramurally funded research programs and may serve as investigators on small or unfunded projects of limited complexity or scope. At this grade level, research A/S-LPs have responsibility for conducting research under the general administrative direction of principal investigators or co-principal investigators of higher grade levels. Research A/S-LPs at this grade level may have authored one or more publications, or presented research findings at a national meeting; and may have earned an academic appointment at an affiliated medical school or local university, usually at the rank of instructor, lecturer, or equivalent.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Ability to execute research independently;

(2) Knowledge of clinical and research literature;

(3) Knowledge of the principles and techniques in the assessment and treatment of auditory and balance disorders, and communication and swallowing disorders; and

(4) Knowledge of anatomy, physiology, language, voice, swallowing, acoustics, applied acoustics, communication, neuroscience and auditory/vestibular pathophysiology.

(5) **Ancillary Assignments.** Individuals may perform program management duties on an occasional basis, where the complexity and amount of work is not substantial enough to qualify for the GS-13 level.

(3) **GS-13**

(4) **Licensure.**

(a) For those grades that require licensure (GS-12 and above), within 2 years of initial appointment under this standard, the incumbent must hold a full, current, and unrestricted license in both areas in a State, Territory, Commonwealth, or the District of Columbia. An A/S-LP who fails to achieve licensure in one area within 2 years of initial appointment under this qualification standard will be restricted to duties in the licensed area.

(b) **Education and Experience.** Completion of 1 year of professional experience equivalent to the next lower grade level directly related to the position being filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(c) **Assignments.** 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. A/S-LPs at this grade level may be appointed to one of the following assignments:

1. Audiologist/Speech-Language Pathologist Team Leader. A/S-LP clinical team leaders are responsible to program or service managers for ensuring that the work assignments of the other members

of the clinical team are carried out by performing a range of duties such as distributing and balancing workload among employees in accordance with established work flow or job specialization; assuring timely accomplishment of the assigned workload; assessing the status, quality, and progress of work; making day-to-day adjustments in accordance with established priorities; obtaining assistance from supervisors or managers on problems that arise. Team leaders exercise authority that is routine or technical in nature but does not require the consistent exercise of independent judgment.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of contemporary audiology and speech-language pathology practice;

(2) Ability to articulate and communicate to the clinical team the assignment, project, problem to be solved, actionable events, and objectives, as well as advise on work methods, practices and procedures;

(3) Ability to coach the clinical team in the selection and application of appropriate problem solving methods and techniques;

*(4) Ability to monitor and report on the status and progress of work; evaluate program quality to ensure that methods, deadlines and quality have been met; and make adjustments to accomplish the workload in accordance with established priorities; and

*(5) Ability to serve as coach, facilitator and/or negotiator in coordinating team initiatives and consensus building activities among clinical team members with widely divergent backgrounds, interests, and points of view.

2. Research Audiologist/Speech-Language Pathologist. Research A/S-LPs at this grade level are actively involved as principal investigators or co-principal investigators in peer reviewed VA, NIH, or comparably rigorous intramural or extramurally funded research programs. At this grade level, research A/S-LPs have responsibility for formulating or conducting research on problems of considerable scope and complexity. Research A/S-LPs at this grade level work with substantial freedom in identifying, defining, and selecting problems for study. At this grade level, research A/S-LPs are mature, competent, and productive workers. They have typically authored one or more publications of considerable interest in the peer-reviewed literature; demonstrated a consistent record of presentation of findings at national scientific meetings; may have earned an academic appointment at the affiliated medical school or local university, usually at the rank of assistant professor or equivalent; and have responsibility for funded research projects.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of, and ability to apply, advanced scientific methods in the design and execution of creative and innovative research;

(2) Ability to convey scientific concepts and methodological principles to individuals with diverse levels of technical expertise;

(3) Ability to apply advanced theories and techniques; and

(4) Advanced knowledge of contemporary audiology and speech-language pathology practice and related disciplines.

(5) **GS-14**

(6) **Licensure.**

(a) For those grades that require licensure (GS-12 and above), within 2 years of initial appointment under this standard, the incumbent must hold a full, current, and unrestricted license in both areas in a State, Territory, Commonwealth, or the District of Columbia. An A/S-LP who fails to achieve licensure in one area within 2 years of initial appointment under this qualification standard will be restricted to duties in the licensed area.

(b) **Education and Experience.** Completion of 1 year of professional experience equivalent to the next lower grade level directly related to the position being filled, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(c) **Assignments.** 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. A/S-LPs at this grade level may only be appointed to research assignments.

1. Research Audiologist/Speech-Language Pathologist. At this grade level, research A/S-LPs are actively involved as principal investigators or co-principal investigators in peer reviewed VA, NIH, or comparably rigorous intramural or extramurally funded research programs. They are involved in peer review activities for VA and non-VA research, e.g., grant review for VA or NIH proposals, local research service committees, e.g., Research and Development (R&D), Health Services Research and Development (HSR&D), Institutional Review Board (IRB), etc.; or serve as consulting editors for peer-reviewed journals. At this grade level, research A/S-LPs have responsibility for formulating and guiding research on problems that are difficult to define or require unconventional or novel approaches, or sophisticated research methods. Research A/S-LPs at this grade level have achieved significant professional recognition by making scientific contributions to research with potential for significant impact in audiology, hearing science, speech-language pathology, or related disciplines. They have typically authored one or more publications of considerable interest and value to the field in the peer-reviewed professional literature; have a consistent record of presentation of findings at national scientific meetings; may have earned an academic appointment at an affiliated medical school or local university, usually at the rank of associate professor or equivalent; and have responsibility for funded research projects.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of, and ability to apply, advanced scientific methods in the design and execution of highly creative, innovative, or complex research;

(2) Ability to lead and motivate a research team with diverse backgrounds, research interests, and points of view;

*(3) Ability to manage large research budgets;

(4) Knowledge of, and ability to evaluate critically, the research of others in peer review or editorial settings;

(5) Ability to convey scientific concepts and methodological principles to individuals with diverse levels of technical expertise;

(6) Ability to apply advanced theories and techniques, demonstrating exceptional depth of knowledge of clinical research literature;

(7) Advanced knowledge of contemporary audiology and speech-language practice and related disciplines;

(8) Advanced knowledge of anatomy, physiology, physiology of speech, acoustics, applied acoustics, communication, neuroscience, psychoacoustics, auditory/vestibular pathophysiology, language, voice, swallowing, and neuroanatomy;

(9) Advanced knowledge of normal and abnormal auditory and balance function; and

(10) Advanced knowledge of normal and abnormal communication and swallowing function.

4. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for A/S-LPs in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements of the proposed grade.

b. Under no circumstances will the educational or licensure requirements be waived, except as provided in paragraph 2c.

c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

**APPENDIX G32. ORTHOTIST/PROSTHETIST QUALIFICATION STANDARD
GS-667**

Veterans Health Administration

1. COVERAGE. The following are requirements for appointment as an orthotist, prosthetist, or orthotist/prosthetist in the Veterans Health Administration (VHA). This General Schedule (GS)-667 series includes positions the duties of which are to: administer, supervise, or perform work involving designing, fabricating, or fitting orthotic or prosthetic devices to preserve or restore function to patients with disabling conditions of the limbs and spine, or with partial or total absence of limbs.

a. The work requires:

(1) Knowledge of anatomy, physiology, body mechanics, the application and function of orthoses and/or prostheses, and of the materials and technology available for use in, and fabrication of, such devices;

(2) Skill in the use of tools, materials, and specialized equipment; and

(3) The ability to deal effectively with patients and their problems and to work with other members of the medical team.

b. Included in this series is such work as:

(1) Planning, developing, and directing an orthotics and prosthetics program at the national, Veterans Integrated Service Network (VISN), or local level;

(2) Serving as an integral member of the professional team providing advice to physicians with regard to development of a treatment plan, selection and prescription of devices, and furnishing information concerning such matters as new developments in the fields of orthotics and prosthetics; and

(3) Assisting in, or leading, research and investigative studies such as those of experimental materials, microprocessor based components, myoelectric components, and emerging technologies.

c. The administrative aspects of the work require an understanding of statistical information and principles, budget development and management, vendor evaluation, human resources, inventory management, the National Prosthetic Patient Database, a knowledge of the Prosthetic National Software package, and knowledge of accreditation requirements for orthotic and prosthetic laboratories.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Noncitizens may be appointed when it is not possible to recruit qualified citizens in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Certification.** Certification is not required as a basic requirement for this occupation; however, it is strongly desirable as evidence of possession of the essential knowledge, skills, and abilities. Certification is required for assignments at the GS-12 grade level and higher.

**PART II
APPENDIX G32**

c. **Loss of Credential.** An employee in this occupation who fails to obtain licensure/certification/registration within the required time frame, or who fails to maintain the required licensure/certification/registration must be removed from the occupation, which may also result in termination of employment.

For occupations which require an active credential (licensure/certification/registration) at all grade levels, at the discretion of the appointing official, an employee may be reassigned to another occupation for which he/she qualifies if a placement opportunity exists. For occupations which require an active credential (licensure/certification/registration) in assignments above the full-performance level only, at the discretion of the appointing official, an employee may remain at an appropriate lower grade level in the occupation when both of the following apply: the credential is not a requirement and a placement opportunity exists.

d. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

e. **Physical Requirements.** See VA Directive and Handbook 5019.

f. **English Language Proficiency.** Orthotists, prosthetists, or orthotist/prosthetists appointed to direct patient care positions must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

a. **Definitions**

(1) **Titles.** For purposes of this qualification standard the reference “orthotist/prosthetist” is intended to mean orthotist, prosthetist, or orthotist-prosthetist. The professional standards board will determine which is most appropriate based upon the function of the position to be filled and the specific qualifications of individuals.

(a) **Orthotist.** An allied health professional specifically trained to provide or manage the provision of a custom designed, fabricated, modified, and fitted orthosis based upon independent or consultative clinical assessment of the patient’s unique needs and desires, as well as their expectations pursuant to a physician’s prescription.

(b) **Prosthetist.** An allied health professional specifically trained to provide or manage the provision of a custom designed, fabricated, modified, and fitted prosthesis based upon independent or consultative clinical assessment of the patient’s unique needs and desires, as well as their expectations and pursuant to a physician’s prescription.

(c) **Orthotist/Prosthetist.** An allied health professional specifically trained to provide or manage the provision of custom designed, fabricated, modified and fitted orthoses and prostheses based upon the independent or consultative clinical assessment of the patient’s unique needs and desires, as well as their expectations and pursuant to a physician’s prescription.

NOTE: Orthotists, prosthetists, and orthotist/prosthetists are sometimes referred to as “Practitioners”, “Clinicians”, and “Clinical Practitioners”.

(2) **Creditable Experience - Knowledge of Current Professional Orthotic and/or Prosthetic Principles and Practices.** To be creditable, the experience must have required the use of knowledge, skills, and abilities associated with current professional orthotic and/or prosthetic professional practice.

(3) **Quality of Experience.** Experience is only creditable if it is equivalent to at least the next lower grade level and is directly related to the position to be filled.

(4) **Part-Time Experience.** Part-time experience is creditable according to its relationship to a full-time work week. For example, an individual employed 20 hours per week, or on a ½ time basis, would receive 1 work week credit for each 2 weeks of service.

**PART II
APPENDIX G32**

b. **Grade Determinations.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates.

(1) **GS-5**

(a) **Education.** A full 4-year course of study at an accredited college or university leading to a bachelor's degree.

OR,

(b) **Experience.** Three years of experience in a related field which demonstrates the basic knowledge, skills, and abilities (core competencies) listed below.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Basic knowledge of medical/scientific terminology.
2. Basic knowledge of psychology.
3. Basic knowledge of materials such as plastics, composites, metals, and leather commonly used in fabrication.
4. Ability to use hand and power tools.
5. Ability to communicate orally and in writing.

(d) **Assignment.** Assignments at this grade level are entry level trainee in nature where the individual receives developmental assignments designed to build upon the base knowledge, skills, and abilities. The orthotist/prosthetist at this level receives training and instruction to develop proficiency in essential occupational tasks such as taking measurements, patient communication, and fabrication and fitting of simple appliances. The work is performed under close supervision.

(2) **GS-7**

(a) **Advanced Entry Level Placement.** See VA Handbook 5005, Appendix G.

OR,

(b) **Experience.** One year of basic experience as an orthotist/prosthetist equivalent to the next lower level and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following KSAs:

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of medical terminology, anatomy, physiology, biomechanics, kinesiology, physics, and etiology of diseases.

2. Knowledge of psychology and age related competency.
3. Knowledge of materials science including materials such as plastics, composites, metals, and leather commonly used in fabrication.
4. Ability to use hand and power tools in the fabrication of devices.
5. Ability to communicate orally and in writing.

(d) **Assignment.** Assignments at this grade level represent an advanced trainee level where the individual continues developing the more complex knowledge, skills, and abilities to prepare for substantially independent functioning at the GS-9 grade level. The work includes consultation with the physician, therapist, and/or senior orthotist/prosthetist staff members to obtain and understand the prescription; taking measurements for fabrication and fitting for common disability levels including orthoses for the trunk and cervical spine, leg braces, and prostheses for short or long stumps; and fabrication and fitting of those appliances. Supervision is close for developmental assignments and more general in nature for assignments for which the individual has demonstrated competency. The supervisor is present at final fittings.

(3) **GS-9**

(a) **Education.** Education equivalent to 2 full years of progressively higher level graduate education or master's or equivalent graduate degree in orthotics and/or prosthetics, provided the applicant's total background demonstrates the core competencies for GS-9 level assignment.

OR,

(b) **Experience.** Completion of 1 year of experience equivalent to the next lower level which demonstrated possession of the knowledge, skills, and abilities at that level needed to provide orthotic/prosthetic services in a hospital setting. In addition, the candidate must demonstrate the following KSAs:

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to attend clinics and participate as a member of the treatment team. This includes knowledge of medical terminology, anatomy, physiology, biomechanics, kinesiology, physics, and etiology of diseases as well as knowledge of psychology and age related competencies.
2. Knowledge of the Healthcare Common Procedure Coding System (HCPCS) coding.
3. Ability to conduct clinical patient analyses such as gait, range of motion, life style, etc., for patients with complex but typical conditions.
4. Ability to take necessary measurements, casts, or scans to develop positive molds of the affected area of the body to create orthoses and/or prostheses.

**PART II
APPENDIX G32**

5. Knowledge of materials science including materials such as plastics, composites, metals, and leather commonly used in fabrication in order to design and fabricate prescribed devices. This would include ability to use hand and power tools in the fabrication of the devices.

(d) **Assignments.** The orthotist/prosthetist performs a broad range of orthotic and prosthetic services designing custom devices using standard components to optimize patient performance for difficult and complex but typical conditions. Assignments include clinic attendance to provide information on standard and stock items which are readily available. The work involves identification of the biomechanical condition; explaining procedures to patients to reduce anxiety and gain support and cooperation; detailed patient assessment including conducting gait analysis, range of motion, coordination and balance, and motor skills; interviewing patients for lifestyle assessments; taking necessary measurements, casts, or scans to develop positive molds; recognizing physical abnormalities, deviations, and complicating conditions; fabricating, fitting, and evaluating these custom devices; and maintenance of the patient's record. The work may include use of Computer Assisted Design/Computer Assisted Manufacturing (CAD/CAM) systems.

(4) GS-11

(a) **Experience.** Completion of 1 full year of experience as an orthotist/prosthetist equivalent to the next lower level that demonstrates possession of the knowledge, skills, and abilities at that level needed to provide orthotic/prosthetic services in a hospital setting. Certification at the practitioner level by the American Board for Certification in Orthotics and Prosthetics (ABC) or the Board for Orthotist/Prosthetist Certification (BOC) as an orthotist, prosthetist, or orthotist/prosthetist is not required but is highly desirable at this level. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Education.** Three full years of progressively higher-level graduate education or a Ph.D. or equivalent doctoral degree in orthotics and/or prosthetics, provided the applicant's total background demonstrates evidence of knowledge, skills, and abilities necessary to perform the work of the position to be filled.

(c) Demonstrated Knowledge, Skills, and Abilities

1. Ability to attend clinics and participate as a fully participating member of the treatment team with considerable influence in the development of the treatment plan. This includes advanced knowledge of medical terminology, anatomy, physiology, biomechanics, kinesiology, physics, and etiology of diseases as well as knowledge of psychology and age related competencies.

2. Ability to conduct clinical patient analyses such as gait, range of motion, life style, etc., for patients with a wide range of complex medical conditions which include unusual problems or complications, and to design unique or innovative devices to accommodate those conditions.

3. Knowledge of materials science including materials such as plastics, composites, metals, and leather used in fabrication in order to design and fabricate prescribed devices considering new and emerging technologies. This would include ability to use hand and power tools and CAD/CAM systems in the fabrication of the devices.

4. Knowledge of materials science in order to design and fabricate prescribed devices considering new and emerging technologies. This would include the ability to use CAD/CAM systems in the fabrication of the devices.

5. Ability to recognize physical abnormalities, deviations, and complicating conditions with potentially life threatening implications.

(d) **Assignments.** This is considered to be the full performance level. The orthotist/prosthetist communicates and interacts with physicians, allied health professionals, patients, and caregivers in various interdisciplinary clinical settings, rehabilitation medicine, orthopedics, neurosurgery, vascular care, podiatry, oncology, etc., as a subject matter expert to develop the orthotic and/or prosthetic treatment plan. The work includes complex patient analyses in accordance with established procedures for patients with unusual conditions, multiple complex conditions, interrelated conditions, etc.; assessment of the patient for indications/contra-indications and discussion the assessment with the physician/requesting provider for the purpose of developing the overall treatment plan with considerable influence in the development of that plan; consideration of new and emerging technologies in designing unique or innovative devices to accommodate or treat a wide range of complex medical conditions which include unusual problems or complications. The orthotist/prosthetist at this level is expected to recognize physical abnormalities, deviations, and complicating conditions with potentially life threatening implications.

(5) **GS-12**

(a) **Experience.** Completion of 1 year of experience equivalent to the next lower level as an orthotist/prosthetist functioning as a full member of the clinical team which includes significant involvement in treatment plan development for the most complex types of conditions. Certification is required at the practitioner level by the American Board for Certification in Orthotics and Prosthetics (ABC) or the Board for Orthotist/Prosthetist Certification (BOC) as an orthotist, prosthetist, or orthotist/prosthetist. Certification as a technician or fitter does not meet this requirement. Candidates must fully meet the KSAs at that level. In addition, the candidate must demonstrate the professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of regulatory requirements established by the ABC, BOC, the National Committee for Orthotic/Prosthetic Education (NCOPE), the International Association of Orthotists and Prosthetists (IAOP), the American Academy of Orthotists and Prosthetists (AAOP), Joint Commission on Accreditation of Healthcare Organizations (JCAHO), etc.

*2. Knowledge of administrative functions including budget development and management, inventory management, space and workload planning as well as knowledge of the National Prosthetic Patient Database, a knowledge of the Prosthetic National Software package, and knowledge of accreditation requirements for orthotic and prosthetic laboratories.

*3. Ability to analyze data and provide reports using HCPCS codes and other patient database information.

PART II
APPENDIX G32

- *4. Ability to provide training to orthotists/prosthetists in new technologies and innovations in devices.
- *5. Ability to manage and supervise employees. (To be used if the assignment is supervisory in nature.)

(c) **Assignments.** 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.

1. Supervisory Orthotist/Prosthetist. The orthotist/prosthetist at this level serves as supervisor of an orthotics/prosthetics laboratory assessing, planning, and evaluating the orthotic/prosthetic program at the facility level to ensure proper coordination between the delivery of orthotic/prosthetic services and the overall delivery of health care. Responsibilities include assuring the accreditation of the laboratory, regulatory compliance, and a variety of administrative duties such as developing a budget, managing inventory and resources, overseeing contract employees, supervising assigned staff, etc. The assignment includes performance of the full range of supervisory duties. This includes responsibility for assignment of duties; development of performance standards and performance evaluations; and recommendations for appointment, awards, advancement, and when appropriate, disciplinary action; etc. At this level, the orthotist/prosthetist serves as a consultant within orthotic and prosthetic treatment service and with other facility health care staff in evaluating health care delivery to patients.

2. Advanced Practitioner. The orthotist/prosthetist assignment at this level is intended for smaller, independent laboratories not large enough to support a supervisory position. In addition to functions typical of the GS-11 grade level, the assignment involves responsibility for assuring the accreditation of the laboratory, regulation compliance, and a variety of administrative duties such as developing a budget; managing inventory and resources; overseeing contract employees; planning the orthotics and prosthetics clinical schedule; conducting site surveys of commercial vendors; devising short and long range goals in accordance with local, VISN, and VHA Central Office direction; and conducting quality assurance activities; etc.

(6) GS-13

(a) **Experience.** Completion of 1 year of experience equivalent to the next lower level, and certification at the practitioner level in both orthotics and prosthetics by the American Board for Certification in Orthotics and Prosthetics (ABC) or the Board for Orthotist/Prosthetist Certification (BOC). Certification as a technician or fitter does not meet this requirement. Candidates must fully meet the KSAs at that level. In addition, the candidate must demonstrate the professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of regulatory requirements established by ABC, BOC, NCOPE, IAOP, AAOP, JCAHO, Centers for Medicare and Medicaid Services (CMMS), Occupational Safety and Health Administration (OSHA), etc., in order to provide advice to VISN management of the implementation of those requirements.

***2.** Knowledge of administrative functions including budget development and management, inventory management, space and workload planning as well as knowledge of the National Prosthetic Patient

Database, a knowledge of the Prosthetic National Software package, and knowledge of accreditation requirements for orthotic and prosthetic laboratories in order to develop VISN guidelines and policies, allocate resources within the VISN, and project future workload for the VISN.

*3. Ability to analyze data and provide reports using HCPC codes and other patient database information from VISN orthotic and prosthetic laboratories within the VISN and to provide such reports to VISN management.

*4. Ability to serve as a consultant to orthotists/prosthetists within the VISN on emerging technologies, the most difficult and complex cases, changes in policy, etc.

*5. Ability to supervise. (To be used if the assignment is supervisory in nature.)

(c) **Assignments.** 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.

1. Supervisory Orthotist/Prosthetist. The orthotist/prosthetist at this level serves as the supervisor and laboratory manager for large laboratories or multiple satellite laboratories. In addition to the responsibilities described in paragraph 3.b.(5)(c)1, this assignment includes serving as a VISN resource/consultant for orthotics and prosthetics; performing or overseeing testing and evaluation of design concepts; overseeing and evaluating contract orthotics and prosthetics vendors.

2. Advanced Practitioner. Non-supervisory orthotists/prosthetists at this level would be rare; however, in some cases may be justified. The professional standards board will evaluate the overall assignment and qualifications of the individual to determine if the assignment warrants this level. The assignment must represent a substantial increase in responsibility over assignments at the GS-12 grade level. An example of an assignment that may possibly warrant this grade level is functioning as a VISN resource/consultant for orthotics and prosthetics and manager of a clinical fabrication facility. The orthotist/prosthetist would serve as a referral source for questions from satellite facilities. This assignment also incorporates those responsibilities described at the GS-12 grade level.

(7) **GS-14 VHA Central Office Orthotist/Prosthetist Clinical Manager**

(a) **Experience.** Completion of 1 year of experience equivalent to the next lower level, and certification at the practitioner level in both orthotics and prosthetics by the American Board for Certification in Orthotics and Prosthetics (ABC) or the Board for Orthotist/Prosthetist Certification (BOC) as an orthotist, prosthetist, or orthotist/prosthetist. Certification as a technician or fitter does not meet this requirement. Candidates must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

*1. Ability to manage and supervise prosthetic and orthotic laboratories, conduct site visits, and review the functional level of each lab.

**PART II
APPENDIX G32**

2. Knowledge of ABC, BOC, OSHA, and JCAHO standards and Prosthetic and Sensory Aids Service policies and ability to apply these in the daily operations of orthotic and prosthetic laboratories.
- *3. Ability to provide training in new technologies involving CAD/CAM systems and devices such as computerized foot orthoses, myoelectric prostheses, and energy storing components.
4. Ability to apply knowledge of the theories and principles used in orthotics and prosthetics to teach custom design and fabrication of devices that are innovative, complex, and/or unusual in nature.
5. Ability to communicate effectively, both orally and in writing, with individuals at all organizational levels including professional staff and administrative staff.
- *6. Ability to function as a team member or leader with orthotists, prosthetists, and other professionals on committees to review local and national agenda items and to make recommendations based on the review.

(c) **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. The clinical manager is responsible for the planning, developing, and implementation of a VHA nationwide delivery system for orthotic/prosthetic appliances; and related services. The assignment involves establishing performance standards for VA orthotic and prosthetic laboratories; assessment of VA orthotist/prosthetist certification; accreditation of VA orthotic/prosthetic laboratories; establishing and implementing an educational plan for clinical and technical orthotic and prosthetic laboratories staff; representing the VA as a liaison to CMMS; establishing uniform competency assessment procedures for VA orthotic and prosthetic laboratories; developing and monitoring orthotic/prosthetic resident NCOPE accreditation and university preceptorship programs; establishing and implementing a communication system for clinical staff; and acting as a VA orthotic and prosthetic laboratory representative on prosthetic clinical management workgroups.

4. DEVIATIONS

- a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for orthotists/prosthetists in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements of the proposed grade.
- b. Under no circumstances will the certification requirements be waived.
- c. Placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

**APPENDIX G33. MEDICAL RECORD ADMINISTRATOR
QUALIFICATION STANDARD
GS-669
Veterans Health Administration**

1. COVERAGE. The following are the requirements for appointment as a Medical Record Administrator (MRA) in the Veterans Health Administration (VHA). These requirements apply to all VHA MRAs in the General Schedule (GS)-669 series.

MRAs in VHA perform or supervise work concerned with the management of a medical record program or the provision of services related to medical record administration/health information services. Medical Record Administrators manage, preserve, analyze, and supervise the use of diagnostic and therapeutic medical records/health information management. They develop policies and procedures, and provide advice on the use of medical records and health information management. Also included are positions assigned responsibility for a section of a medical record department as well as those assigned quality assurance, risk management, compliance, privacy, decision support, financial, or technology focused health information management responsibilities. In the health care community, MRAs are generally referred to as “health information managers,” and this term is considered to be synonymous where stated in this qualification standard.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified candidates in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Education or Experience**

(1) **Experience**

(a) Three years of experience in the field of medical records that included the preparation, maintenance, and management of medical records and health information systems. At least 1 year of this experience must be comparable to a GS-4 level position.

An associate’s degree in the health information field plus 1 year of experience that included the preparation, maintenance, and management of medical records and health information systems.

NOTE: Successfully completed training for health information technicians in a school accredited by the American Health Information Management Association (AHIMA) at the time the program was completed may be substituted for 1 year of experience. No credit may be given for partial completion of such training.

OR,

(2) **Education.** Education equivalent to a baccalaureate degree from an accredited university or college.

OR,

**PART II
APPENDIX G33**

(3) **Experience/Education Combination.** Equivalent combinations of experience and education may be used to meet basic requirements.

c. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

d. **Physical Requirements.** See VA Directive and Handbook 5019.

e. **English Language Proficiency.** MRAs must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS

a. **Definitions**

(1) **Creditable Experience**

(a) **Knowledge of Current Medical Record Administration Practices.** To be creditable, experience must have required the use of knowledge, skills, abilities, and other characteristics (also referred to as “core competencies”) associated with current health information practice. This knowledge may be evidenced by one or more of the following:

1. The equivalent of 1 year of active practice in the health information management field that included knowledge of the content and uses of health records, computerized information systems, and disease and procedural indices; ability to apply the concepts, principles and practices of health information administration; ability to apply knowledge of anatomy, pathophysiology, and medical terminology to health information management functions.

OR,

2. Maintenance/possession of an active credential from AHIMA as a Registered Health Information Administrator (RHIA) or Registered Health Information Technician (RHIT);

OR,

3. Successful completion of academic course work leading to an advanced degree in health information management or a related field.

(2) **Quality of Experience.** Experience is only creditable if it is in health information management and is directly related to the position to be filled or in a related field, such as quality assurance, Health Insurance Portability & Accountability Act (HIPAA) privacy, or electronic medical record implementation. Qualifying experience must also be at a level and complexity comparable to medical record management experience at the next lower grade level. Registration is offered by AHIMA as a Registered Health Information Administrator (RHIA) or Registered Health Information Technician (RHIT) and is highly desirable.

(3) **Part-Time Experience.** Part-time experience as a medical record administrator is creditable according to its relationship to full-time workweek. For example, an MRA would receive 1 week of full-time credit for each 2 weeks of half-time work.

b. **Grade Determinations.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates.

(1) **GS-5.** None beyond basic requirements.

(a) **Assignment.** Employees at this grade level serve in an MRA career development position under close supervision.

(2) **GS-7**

(a) **Experience.** In addition to the basic requirements, at least 1 year of experience comparable to the next lower grade level. In addition, the candidate must demonstrate the following KSAs:

**PART II
APPENDIX G33****OR,**

(b) **Advanced Entry Level Placement.** See VA Handbook 5005, Appendix G.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Comprehensive understanding of clinical classification systems and nomenclatures.
2. Ability to provide advisory and technical expertise on a range of health information management/medical record issues to staff, management, and the general public.
3. Ability to use data collection and analytical techniques for purposes of review, quality control, studies and analysis.
4. Knowledge of and ability to use and evaluate software programs and information systems relative to health information services.
5. Knowledge of anatomy, pathophysiology, and medical terminology.

(d) **Assignment.** Employees at this level typically serve in an MRA career development position under the supervision of higher level MRAs and are provided ongoing guidance in day-to-day assignments.

(3) **GS-9**

(a) **Experience.** At least 1 year of experience at the next lower grade level that demonstrates the knowledge, skills, abilities, and other characteristics described at that level. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Education.** Education equivalent to 2 full years of progressively higher level graduate education or master's or equivalent graduate degree from an accredited college or university in a field directly related to health information.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to interpret and apply knowledge of clinical classification systems such as International Classification of Diseases (ICD), Current Procedural Technology (CPT), the Systematized Nomenclature of Medicine (SNOMED), and the Healthcare Common Procedure Coding System (HCPCS);
2. Ability to determine and evaluate compliance with the standards of regulatory and accrediting bodies such as the Joint Commission on the Accreditation of Healthcare Organizations (JCAHO), the Centers for Medicare and Medicaid Services, etc.;

3. Ability to provide technical advice and/or provide oversight on health information issues. This includes skill in interpreting and adapting health information management guidelines that are not completely applicable to the work or have gaps in specificity;

4. Ability to extract information, generate reports from various databases (e.g. clinical, financial), and analyze data including a consideration of such issues as applicability, validity, reliability, and the quality and characteristics of the data source, etc.;

5. If the position is supervisory in nature, ability to successfully apply principles and techniques of sound human resource management;

6. If the position is supervisory in nature, skill in administrative management, i.e., budgeting, contracting, procurement, property management; and

7. If the position is supervisory in nature, ability to delegate authority, evaluate and oversee people and programs, accomplish program goals, and adapt to changing priorities.

(d) **Assignments.** At the GS-9 grade level, individuals may be assigned to advisory, consultative, supervisory, or non-supervisory positions in a health information department or other organizational entity requiring health information management competencies.

(3) **GS-11**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level that demonstrates the KSAs described at that level. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Education.** Education equivalent to 3 full years of progressively higher level graduate education or a Ph.D. or equivalent doctoral degree from an accredited university or college in the field of health information.

(c) **Demonstrated Knowledges, Skills, and Abilities**

1. Skill in project management and process improvement, which includes the ability to develop new or improved solutions to complex technical problems in health information management;

2. Ability to advise management and staff about adequate medical record documentation, health information services, and/or computerized patient records based on current statutes and standards;

3. Ability to plan for, justify, test, assess, and/or advise about the use of current and future software programs or information systems, implement and integrate such products into current health information management processes, and recommend changes in policies or procedures;

4. Ability to interpret, implement, and apply knowledge of privacy and confidentiality requirements affecting individual patient/protected health information;

**PART II
APPENDIX G33**

5. Demonstrated comprehensive knowledge of medical and legal requirements related to both paper and electronic medical records;
6. Ability to communicate and negotiate with professionals in higher level positions;
7. If the position is supervisory in nature, ability to plan, develop, direct, and evaluate health information or related functions;
8. If the position is supervisory in nature, ability to successfully apply principles and techniques of sound human resources management; and
9. If the position is supervisory in nature, skill in administrative management, i.e., budgeting, contracting, procurement, and property management.

(d) **Assignments.** This is considered the full performance level for non-supervisory positions. Individuals at the GS-11 level may be assigned supervisory and program management responsibilities at smaller medical centers where the clinical program does not include a wide range of acute care activities and where the medical records unit staff is predominately Medical Record Technicians. Employees may also be assigned supervisory and program responsibilities for a portion of the medical records program at medium to complex medical centers that provide a wide range of acute care activities but where a higher graded Medical Record Administrator has overall program responsibilities.

(5) GS-12

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level that demonstrates the KSAs described at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs indicated by an asterisk (*):

(c) Demonstrated Knowledge, Skills, and Abilities

1. Ability to identify, define, and resolve managerial, administrative, and computerized medical record problems associated with unique, underdeveloped, and controversial aspects of medical record management;
- *2. Skill in developing new policies and procedures for administering electronic medical record programs in order to improve program effectiveness and/or apply newly developed programs or theories to problems that require new approaches;
3. Ability to understand computerized patient record data systems that are meaningful to the medical center as a whole;
- *4. Ability to teach new and continuing users in electronic health record and health data systems as appropriate to the current assignment;
- *5. If supervisory, ability to manage assigned resources;

*6. If the position is supervisory in nature, the ability to provide the full range of supervisory duties which would include assignment of work; completing performance evaluations; selection of staff; and recommendation of awards, advancements, and, when appropriate, disciplinary actions.

(d) **Assignments.** 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. Individuals at the GS-12 level are assigned to one of the following assignments:

1. **Supervisory Medical Record Administrators (Chief HIMS)** are delegated full program management and supervisory responsibility to direct professional (MRA), technical (MRT), and other support staff in medical health information work. This is considered the typical managerial and supervisory level at most VA Medical Centers. MRAs in this assignment provide technical advice, planning, and evaluation about health information management issues impacting the overall program on a regular and recurring basis. The MRA is the highest level professional position at the facility with responsibility for the management and direction of the health information management program and services. Multi-division, integrated health care systems under the leadership of a single director are considered to be a single facility. An individual who has program responsibility for less than the single health care system do not have full program responsibility for the medical records program.

2. **Supervisory Medical Record Administrators** in those VA Medical Centers that are in the highest complexity level category for VHA facilities which are complex, highly affiliated, tertiary care facility/health care system with comprehensive research programs and thus warrant an expanded senior leadership team may be assigned to Assistant Chief HIMS duties where the number of employees within the HIMS unit justifies the existence of such a position.

3. **Medical Record Administrators** serving at the Network level who have oversight responsibilities for a portion of the overall medical records program (e.g. coding compliance across the Network).

(6) **GS-13**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level that demonstrates the KSAs described at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated with an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of the legal, ethical, and professional standards as they apply to health information management;

2. Ability to provide sound, technical guidance to the professional and medical center staff about major program, legal, or procedural changes related to health information management;

*3. Ability to revise medical center procedures to improve health information management services and to evaluate, modify, and/or adapt new methods to meet regulatory requirements;

**PART II
APPENDIX G33**

*4. Skill in conducting studies and analyzing data; and

*5. Knowledge and skill in management/administration, which includes program planning, coordination, interpretation, supervision, consultation, negotiation, problem solving, and monitoring.

(c) **Assignments.** 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 this grade level, positions may be non-supervisory, supervisory, or managerial as follows.

Supervisory Medical Record Administrators at this grade level are Chiefs of HIMS in VA Medical Centers that are the highest complexity level category for VHA facilities, and which are affiliated, tertiary care facility/health care system with comprehensive research programs and thus warrant an expanded senior leadership team. MRAs in this assignment provide technical advice, planning, and evaluation about health information management issues impacting the overall program on a regular and recurring basis. The MRA is the highest level professional position at the facility with responsibility for the management and direction of the health information management program and services.

Supervisory Medical Record Administrators at this grade level are Chiefs of HIMS for more than one VA Medical Center when each facility is not individually within the grouping of most complex VA Medical Centers, BUT when taken together the medical records program is equivalent to those at the most complex VA Medical Centers. MRAs in this assignment provide technical advice, planning, and evaluation about health information management issues impacting the overall program on a regular and recurring basis. The MRA is the highest level professional position for those facilities with responsibility for the management and direction of the health information management program and services across the facilities. Multi-division, integrated health care systems under the leadership of a single director are considered to be a single facility.

Supervisory Medical Record Administrators at this grade level are Chiefs of HIMS for an entire Network. MRAs in this assignment provide technical advice, planning, and evaluation about health information management issues impacting the overall program on a regular and recurring basis. The MRA is the highest level professional position for those facilities with responsibility for the management and direction of the health information management program and services across the facilities in the Network.

In some cases, placement of individuals in non-supervisory medical record administrator positions may be appropriate at the GS-13 level. Establishment of non-supervisory GS-13 level MRA positions must be approved by the Under Secretary for Health, or designee in VHA Central Office.

Typical examples include: medical record administrators who perform national level consultative services at least 25% of the time; Clinical Application Coordinators when the professional knowledge and skill of a Medical Record Administrator is required in order to perform the duties or would enhance the quality of the facility's overall clinical program; Medical Record Administrators who perform duties within field based central office components established to enhance VHA's Computerized Patient Record System.

(7) **GS-14**

(a) **Experience.** At least 1 year of experience comparable to the next lower grade level that demonstrates the KSAs described at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledges, Skills, and Abilities**

*1. Ability to develop, maintain, and evaluate health information management policy and program needs at the national level and serve as a national technical expert in the medical record administration/health information management program area.

*2. Ability to provide formal clinical, research, and /or educational consultation on a wide range of health information management issues such as HIPAA, electronic medical record implementation and/or quality assurance, for use by the field MRAs and VHA Central Office program officials.

*3. Ability to determine methodologies for achieving compliance with new and changing regulations governing health information at the national level to improve program effectiveness, implement new legislation and/or resolve persistent program problem areas.

(c) **Assignments.** 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. GS-14 MRA placements are limited to positions which have national level program assignments as a primary responsibility, function as a national technical expert in the field of medical record administration/health information management, provide leadership and guidance at the national level, and have final and independent technical authority. Establishment of a GS-14 level position must be approved by the Under Secretary for Health, or designee in VHA Central Office.

4. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for medical record administrators in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements on the proposed grade.

b. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

APPENDIX G34. PROSTHETIC REPRESENTATIVE QUALIFICATION STANDARD
GS-672
Veterans Health Administration

1. COVERAGE. This standard applies to all prosthetic representative positions in the Veterans Health Administration (VHA). The occupation performs, supervises or administers the work of rendering prosthetic and sensory aids services to disabled patients. The work may include: planning, developing, and directing a prosthetic and sensory aids program at local, Veterans Integrated Service Network (VISN), or national levels; advising clinicians on selecting, prescribing, and acquiring prosthetic devices; advising on new prosthetics field developments and supply sources; interpreting clinician prescriptions to ensure proper device selection; authorizing their purchase, fabrication, or repair; maintaining liaison with prosthetic supply manufacturers and dealers, inspecting their facilities and services, and participating in awarding prosthetic appliance contracts; participating in investigative/research studies by selecting pilot wearers of newly developed prosthetic items, and evaluating and compiling data on item usefulness; and providing multiple facilities with prosthetic and sensory aids technical/administrative advice and assistance.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified citizens in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Experience and Education**

(1) **Experience.** Three years of experience that demonstrates: knowledge of accounting methods; ability to analyze, comprehend, and apply decisions; basic knowledge of inventory management procedures; ability to use computer software packages for word processing, spreadsheet development, and database management; ability to compile, research, analyze, comprehend, and apply information or data; and ability to work as a team member in a group setting.

OR,

(2) **Education.** Education equivalent to a bachelor's degree from an accredited university or college.

OR,

(3) **Experience/Education Combination.** Equivalent combinations of experience and education are qualifying.

c. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 Hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including

**PART II
APPENDIX G34**

positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

d. **Physical Requirements.** See VA Directive and Handbook 5019.

e. **English Language Proficiency.** Prosthetic representatives must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS**a. Definitions**

(1) **Creditable Experience.** Experience is only creditable if documented in the application and verifiable through employment references and/or other means.

(2) **Quality of Experience.** Experience is only creditable if it is equivalent to at least the next lower grade level and is directly related to the position to be filled.

(3) **Part-time Experience.** Part-time experience as a prosthetic representative is credited according to its relationship to the full-time workweek. For example, a prosthetic representative would receive 1 week of full-time credit for each 2 weeks of half-time work.

(4) **Specialty Services.** Services that are unique to more complex facilities. These include, but are not limited to:

Spinal Cord Injury Unit (SCIU)
Blind Rehabilitation Center (BRC)
Traumatic Brain Injury (TBI)
Home Based Primary Care (HBPC)
Driver Rehabilitation Training
Orthotic and Prosthetic Laboratories
Optical Laboratories
Prosthetic Implants

b. **Grade Determination.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates:

(1) **GS-5**

(a) **Experience.** None beyond the basic requirements.

(b) **Assignment.** Employees at this grade level serve in a prosthetic representative career development position.

(2) **GS-7**

(a) **Experience.** In addition to the basic requirements, 1 year of experience equivalent to the next lower level. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Advanced Entry Level Placement.** See VA Handbook 5005, Appendix G. Appropriate bachelor's degrees include business; those in a medical field, e.g., kinesiotherapy, occupational therapy, physical therapy, orthotics, prosthetics, nursing, etc.; public administration; health administration; or those in related courses of study.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to understand and apply procedures, regulations, and laws.
2. Knowledge of procurement practices.
3. Knowledge of appropriations and obligations relating to accounts.
4. Knowledge of general anatomy and medical terminology.
5. Knowledge of principles and practices of budget formulation and execution.

**PART II
APPENDIX G34**

(d) **Assignment.** Employees at this grade level typically serve in a prosthetic representative career development position, or as a prosthetic representative who does not have signatory authority.

(3) GS-9

(a) **Experience.** At least 1 year of experience equivalent to the next lower level. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Education.** Education equivalent to 2 full years of progressively higher level graduate education or master's or equivalent graduate degree from an accredited university or college in the field of business; a medical field, e.g., kinesiotherapy, occupational therapy, physical therapy, nursing, etc.; public administration; health administration; or those in related courses of study.

(c) Demonstrated Knowledge, Skills, and Abilities

1. Ability to maintain and control an inventory system.
2. Knowledge of methods to identify trends and causation factors sufficient to analyze prepared data and gather information to inform and advise management.

(d) **Assignment.** Employees at this grade level typically serve in a prosthetic representative career development position as a prosthetic representative serving as a technical advisor to a facility with one specialty service such as those indicated in paragraph 3a(4) or as a prosthetic representative with signatory authority but with no specialty service.

(4) GS-11

(a) **Experience.** At least 1 year of experience equivalent to the next lower level. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Education.** Education equivalent to 3 full years of progressively higher level graduate education or a Ph.D. or equivalent doctoral degree from an accredited university or college in the field of business; a medical field, e.g., kinesiotherapy, occupational therapy, physical therapy, nursing, etc.; public administration; health administration; or those in related courses of study.

(c) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of prosthetic programs related to at least 2 specialty programs as identified in 3a(4).
2. Ability to advise clinicians on the selection, prescription, and acquisition of a full range of prosthetic devices.

3. Ability to maintain liaison with prosthetic supply manufacturers and dealers by inspecting their facilities and services, and participating in the award of prosthetic appliance contracts by providing advisory services to contract specialists.

4. Knowledge of investigative/research studies for newly developed prosthetic items in order to select pilot wearers, and compile data on item usefulness.

(d) **Assignment.** This is considered to be the full performance level. Typical assignments include serving as a prosthetic representative with signatory authority providing technical advice to a facility with 2 or more specialty services such as those in paragraph 3a(4) or as a Supervisory Prosthetic Representative who is not in a service chief or assistant service chief position.

4. SERVICE CHIEFS, ASSISTANT SERVICE CHIEFS, AND OTHER PROGRAM MANAGEMENT POSITIONS

a. **Service Chief.** Assignment as a Service Chief is restricted to those serving with full line authority as Chief of a Prosthetic and Sensory Aids Service. These individuals are fully responsible for managing and supervising all phases of Prosthetic and Sensory Aids Service operations.

b. **Assistant Service Chief.** Assignment as an Assistant Chief is restricted to those serving as a full assistant to a Chief, Prosthetic and Sensory Aids Service. These individuals are to share, with a Chief, Prosthetic and Sensory Aids Service, full responsibility for managing and supervising all phases of Prosthetic and Sensory Aids Service operations.

c. **Other Program Management Positions.** Assignment in a program management capacity is restricted to a Supervisory Prosthetic Representative who serves as a VISN Service Line Manager, a VISN-level senior-level practitioner, or as a staff senior-level practitioner who serves at the VHA program office level in Central Office.

d. Grade Levels

(1) GS-11

(a) **Experience.** At least 1 year of experience equivalent to the next lower level, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

OR,

(b) **Education.** Education equivalent to 3 full years of progressively higher level graduate education or a Ph.D. or equivalent doctoral degree from an accredited university or college in the field of business; a medical field, e.g., kinesiotherapy, occupational therapy, physical therapy, nursing, etc.; public administration; health administration; or those in related courses of study.

**PART II
APPENDIX G34****(c) Demonstrated Knowledge, Skills, and Abilities**

- *1. Ability to manage and supervise.
- 2. Ability to initiate new ideas and approaches and demonstrate resourcefulness.
- *3. Ability to manage resources, e.g., space, equipment, supplies, etc., and personnel at the local level.
- *4. Ability to draft and/or recommend local policies and/or directives.
- 5. Skill in managing a prosthetic program at the local level.

(c) **Assignments.** Employees at this grade level typically serve as a Supervisory Prosthetic Representative in either a Chief of a Prosthetic and Sensory Aids Service position at a facility that does not have specialty services such as those in paragraph 3a(4), in an Assistant Chief position at a facility that has one specialty service such as those in paragraph 3a(4); or in a developmental capacity in Supervisory Prosthetic Representative positions with known promotion potential to a higher grade.

(2) GS-12

(a) **Experience.** At least 1 year of experience equivalent to the next lower level, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) Demonstrated Knowledge, Skills, and Abilities

- 1. Ability to understand the unique characteristics of sites for which responsible.
- *2. Skill in participating in VISN/facility initiatives, workgroups, and/or committees.
- *3. Ability to draft and/or recommend VISN/facility policies and/or directives.

(b) **Assignments.** 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. Employees at this level typically serve as a Supervisory Prosthetic Representative in a Service Chief position at a facility that has one specialty service such as those in paragraph 3a(4), in an Assistant Chief position at a facility that has 2 or more specialty services such as those in paragraph 3a(4), or in a developmental capacity in Supervisory Prosthetic Representative positions with known promotion potential to a higher grade.

(3) GS-13

(a) **Experience.** At least 1 year of experience equivalent to the next lower level, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of national initiatives and/or intra-agency workgroups or committees.
- *2. Ability to implement national policies over multiple facilities.

(c) **Assignments.** 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. Employees at this level typically serve as a Supervisory Prosthetic Representative in a Service Chief position at a facility that has 2 or more specialty services such as those in paragraph 3a(4) or in a developmental capacity in Supervisory Prosthetic Representative positions with known promotion potential to a higher grade.

(4) **GS-14**

(a) **Experience.** At least 1 year of experience equivalent to the next lower level, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

- *1. Ability to draft, recommend, and/or implement national policies and/or directives.
2. Knowledge of VISN and/or national initiatives and/or inter/intra-agency workgroups or committees.
- *3. Skill in managing a prosthetic program at the VISN level.
4. Skill in managing resources, i.e., space, equipment, supplies, staff, at the VISN level.

(c) **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. Employees at this level will typically serve as a Supervisory Prosthetic Representative serving as the VISN subject matter expert for the Prosthetic Program, as a VISN Service line Manager, or as a VACO national program manager.

5. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for prosthetic representatives whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements of the proposed grade.

b. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

**APPENDIX G35. MEDICAL RECORD TECHNICIAN QUALIFICATION STANDARD
GS-675****Veterans Health Administration**

1. COVERAGE. The following are the requirements for appointment of Medical Record Technicians (MRTs) in the Veterans Health Administration (VHA). These requirements apply to all MRTs in the General Schedule (GS)-675 series. Medical record technicians organize, process, and maintain medical records and health information. They assemble, review, analyze, code, abstract, maintain, compile, and extract medical record and health data. MRTs check medical records for completeness, accuracy, and compliance with requirements of regulatory and accrediting agencies. Some MRTs maintain clinical registries and work to meet the standards of regulatory and accrediting agencies. Typically MRTs work under the guidance of the Medical Record Administrator. In the health care community MRTs are known by a number of titles depending on job function. Terms may include health information technician, coder, tumor registrar, or registry technician. These types of functions are incorporated in the MRT occupational qualification standard.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified candidates in accordance with chapter 3, section A, paragraph 3g, this part.)

b. Experience and Education

(1) **Experience.** Two years of experience that demonstrates the applicant's ability to perform the work, or provides familiarity with the work. Six months of the required 2 years of experience must have provided the knowledge, skills, abilities, and other characteristics (KSAs) needed to perform MRT work.

OR,

(2) **Education.** Successful completion of an associate's degree with a major field of study in medical record technology/health information technology which was accredited by the American Health Information Management Association (AHIMA) at the time the program was completed.

OR,

(3) **Experience/Education Combination.** Equivalent combinations of experience and education are qualifying. The following educational/training substitutions are appropriate in this provision for combining education and experience:

(a) Successful completion of an associate's degree in a field of study other than medical records/health information will substitute for 18 months of the required experience.

(b) Successful completion of a course for medical technicians, hospital corpsmen, medical service specialists, or hospital training, obtained in a training program given by the Armed Forces or the U.S. Maritime Service under close medical and professional supervision, may be substituted on a month-for-month basis for up to 1 year of experience.

**PART II
APPENDIX G35**

(c) Successful completion of a post-high school course of study in medical record technology, which includes courses in anatomy, physiology, and medical record techniques and procedures, may substitute on a month-for-month basis for up to 1 year of experience.

(d) Successful completion of post-high school courses for medical administrative personnel, obtained in a closely supervised training program given by the Armed Forces, may be substituted for experience on a month-for-month basis for up to 6 months provided the training program included courses in anatomy, physiology, and medical record techniques and procedures.

c. Grandfathering Provision. The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

d. Physical Requirements. See VA Directive and Handbook 5019.

e. **English Language Proficiency.** MRTs must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS

a. Definitions

(1) Creditable Experience

(a) **Knowledge of Current Medical Record Technology.** To be creditable, the experience must have required the use of knowledge, skills, abilities, and other characteristics (also referred to as “core competencies”) associated with current health information or medical record technology and/or cancer registry practice.

(b) **Quality of Experience.** Experience is only creditable if it is either directly related to the position to be filled or in a related field. Qualifying experience must also be at a level comparable to medical record technology experience at the next lower grade level.

(c) **Part-Time Experience.** Part-time experience as a professional medical record technician is credited according to its relationship to a full-time workweek. For example, a medical record technician would receive 1 week of full-time credit for each 2 weeks of half-time work.

(d) Specialized Areas for Medical Record Technicians

1. **Tumor (or Cancer) Registry** positions maintain clinical registries and work to meet the standards of regulatory and accrediting agencies related to approved cancer and/or other programs requiring registries. Certification is offered by the National Cancer Registrars Association as a Certified Tumor Registrar (CTR). Certification is highly desired.

2. **Medical Coders** analyze and abstract medical record data and assign codes using clinical classification systems. Medical coding requires independent judgment based on medical record documentation and personal coding knowledge and skill. Certification is offered by AHIMA as a Certified Coding Associate (CCA), Certified Coding Specialist (CCS), Certified Coding Specialist-Physician-based (CCS-P), or Registered Health Information Technician (RHIT). Certification is offered by the American Academy of Professional Coders (AAPC) as a Certified Professional Coder Apprentice (CPC-A), Certified Professional Coder-Hospital Apprentice (CPC-H-A), Certified Professional Coder (CPC) or Certified Professional Coder-Hospital (CPC-H) and is highly desired at the higher grade levels.

3. **Medical Record Technicians** perform medical record technician work but are not working in specialized registry or medical coding assignments. This assignment includes lead and supervisory positions.

b. **Grade Determinations.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates.

**PART II
APPENDIX G35****(1) GS-4**

(a) **Experience or Education.** None beyond basic requirements.

(b) Demonstrated Knowledge, Skills, and Abilities

1. Basic knowledge of medical terminology;
2. Basic knowledge of disease processes and human anatomy;
3. Basic knowledge of medical record/health information guidelines, techniques, and procedures;
4. Knowledge of the medical and legal significance of medical records.

(c) **Assignment.** Employees at this level serve in entry level MRT career development positions in any area of medical records. It is expected that they receive guidance from more experienced staff members for more complex issues, and require daily direct supervision.

(3) GS-5

(a) **Experience.** In addition to the basic requirements, at least 1 year of experience at the next lower grade level and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Education.** Successful completion of a baccalaureate degree from an accredited college or university with a major field of study in medical record technology/health information technology or a related degree with courses related to medical record technology sufficient to evidence the core competencies identified.

(c) Demonstrated Knowledge, Skills, and Abilities

1. Ability to apply knowledge of medical terminology, human anatomy/pathophysiology, and disease processes sufficient to appropriately file, locate, and disclose health information;
2. Ability to correctly apply a practical knowledge of laws and regulations related to the confidentiality of health information and the release of information from medical records;
3. Knowledge of the internal organization of medical records and medical record references and procedures as appropriate to the position.
4. Ability to use health information software appropriate to the position, such as the electronic patient record, record tracking systems, chart deficiency systems, coding and abstracting systems, release of information systems, document scanning technology, electronic spreadsheets, transcription systems, encoder products, electronic encounter forms, database software, etc.

(d) **Assignments.** Employees at this grade level serve in developmental positions as MRTs in any of the identified specialized areas and receive guidance from more experienced staff members for more complex medical records and/or coding procedures.

(4) **GS-6**

(a) **Experience.** One year of experience comparable to the next lower level and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills and Abilities**

1. Ability to apply knowledge of medical terminology, human anatomy/pathophysiology, and disease processes to fully understand the content of a patient record;
2. Ability to navigate efficiently through the paper and electronic medical record to find needed information;
3. Skill in interpreting and adapting health information guidelines that are not completely applicable to the work or have gaps in specificity and ability to use judgment in completing assignments with incomplete or inadequate guidelines;
4. If assigned to medical record analysis, ability to judge whether medical records contain sufficient information for regulatory requirements; are acceptable as legal documents; are adequate for continuity of patient care; and support education and research needs. This includes the ability to take appropriate actions if medical record contents are not adequate; accurate, timely, and/or reliable;
5. Ability to apply laws and regulations on the confidentiality of health information (e.g., Privacy Act, Freedom of Information Act, Health Insurance Portability and Accountability Act (HIPAA));
6. If assigned to a tumor registry position, ability to apply guidelines and standards for the maintenance of an approved tumor registry; and
7. If assigned to a medical coding position, comprehensive knowledge of classification systems, such as current versions of International Classification of Diseases (ICD), Current Procedural Technology (CPT), the Systematized Nomenclature of Medicine (SNOMED) or Healthcare Common Procedure Coding System (HCPCS), and skill in applying coding knowledge.

(c) **Assignments.** Employees at this level typically work in any specialty area of medical record/health information. In some instances, they may be assigned lead or supervisory positions when the highest level of non-supervisory MRT work is at a lower level. They receive little guidance from more experienced staff members.

NOTE: In order to be considered a leader, the employee must be responsible to his/her supervisor for ensuring that the work assignments of the other employees of the team are carried out by successfully performing a range of duties which include such duties as distributing and balancing workload,

**PART II
APPENDIX G35**

monitoring the status and progress of work, instructing and answering employee questions, checking employee work, amending or rejecting work not meeting standards, approving leave for a few hours or for emergencies, resolving simple, informal complaints, etc.

(5) GS-7

(a) **Experience.** One year of experience comparable to the next lower grade level and must fully meet the KSAs at that level including those for tumor registry or coder assignments if applicable. In addition, the candidate must demonstrate the following KSAs:

(b) **Assignments.** Employees at this level will be assigned to a specific area of medical record/health information (tumor registry, medical coding, or medical records). They may be in lead or supervisory positions, as appropriate to the assignment. Core competencies are described for each type of assignment as follows.

1. Tumor Registry Positions. Tumor registry assignments at this level represent the advanced developmental level leading to the full performance level. At this level, MRTs in tumor registry assignments perform a substantially full range of duties but will receive more guidance and direction regarding unfamiliar or unusual situations.

a. Demonstrated Knowledge, Skills and Abilities

(1) In-depth knowledge of professional registry practices;

(2) In-depth knowledge of fundamental tumor registry operations;

(3) Ability to analyze data using comparative statistical methods and present the data in graphic format;

(4) Experience in meeting the standards of external approving bodies;

(5) Ability to communicate with, and advise, clinical staff about registry operations, statistical reports, and the standards of approving bodies; and

(6) Ability to manage priorities and coordinate work in order to complete duties at the assigned grade level in an accurate and timely fashion; ability to follow-up on pending issues; and demonstrated understanding of the impact of incomplete work.

2. Medical Record Technician Coding Positions. Medical coding assignments at this grade level represent the advanced developmental level leading to the full performance level. It is expected that the medical coder will do more than validate code assignments made by clinical staff, but will have the skill to make independent judgment in selection of codes based on medical documentation and personal coding knowledge and skill. Reviewing codes selected by physicians/ health care providers or reviewing entries on an encounter form or superbill is not considered comprehensive coding and, without the demonstration of additional skills, is not acceptable to achieve this level. Since coding rules are specific to individual classification systems, knowledge of coding systems other than the one utilized in the position for which the individual is being boarded does not automatically meet the requirements of the position. Generally, to

receive credit for experience, the coder should have performed the type of coding specified as a significant portion of duties on a regular and recurring basis, and provide evidence of the core competencies identified.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Knowledge of classification systems, such as current versions of ICD, CPT, SNOMED or HCPCS, and skill in applying coding knowledge to a wide range of specialty areas;

(2) Knowledge of Joint Commission on Accreditation of Healthcare Organizations (JCAHO) as well as Medicare/Centers for Medicare & Medicaid Services (CMS) and/or VHA medical record documentation requirements;

(3) Ability to communicate with clinical staff on coding and documentation issues such as recording inpatient and outpatient diagnoses and procedures, the use of encounter forms, the correct sequencing of diagnoses/ procedures, and/or the relationship between health care documentation and code assignment;

(4) Ability to research and solve complex questions related to coding and documentation, such as adequate health information documentation, coding, billing, resident supervision, etc.; and

(5) Skill in reviewing and correcting system or processing errors, reviewing transmission reports, and ensuring all assigned episodes are complete and accurate as appropriate to the duties assigned,

3. Medical Record Technician. This is considered the full performance level for MRTs who are not assigned to coding or registry positions. Medical Record Technicians at the GS-7 level may be assigned to assemble or review documentation as well as review, analyze, abstract, compile, maintain, and/or extract health data. They may organize medical records and check for completeness, accuracy, and compliance, and/or may be assigned to scanning, privacy, research, education, revenue, or similar functions. Such assignments do not automatically qualify for this grade level unless core competencies are met.

a. Demonstrated Knowledge, Skills, and Abilities

(1) Skill in applying a comprehensive knowledge of health information technology principles, concepts, and methodology in carrying out assignments, operations, or procedures;

(2) Ability to perform work involving different and unrelated processes and methods which includes the ability to analyze the subject, phase, or issues involved in each assignment;

(3) Skill in communicating with individuals or groups who may be uncooperative, fearful, or skeptical, in order to obtain the desired effect, such as gaining compliance with established policies and regulations by persuasion or negotiation, or gaining information by establishing rapport; and

(4) Ability to manage priorities and coordinate work in order to complete duties in an accurate and timely fashion. This includes the ability to follow-up on pending issues and demonstrates an understanding of the impact of incomplete work.

**PART II
APPENDIX G35**

4. Lead or Supervisory Medical Record Technician Positions. An MRT may qualify at the GS-7 grade level by assignment as a work leader or supervisor. The employee must serve as a work leader as a regular and recurring part of assignments, or supervise medical record technicians, where the highest level of non-supervisory work is at the GS-6 grade level. In order to be considered a leader, the employee must be responsible to his/her supervisor for ensuring that the work assignments of the other employees of the team are carried out by successfully performing duties which include distributing and balancing workload, monitoring the status and progress of work, instructing and answering employee questions, checking employee work, amending or rejecting work not meeting standards, approving leave for a few hours or for emergencies, resolving simple, informal complaints, etc.

(a) Demonstrated Knowledge, Skills and Abilities

(1) Ability to manage priorities and coordinate work in order to complete duties in an accurate and timely fashion;

(2) Ability to follow-up on pending issues and demonstrates an understanding of the impact of incomplete work;

(3) Ability to demonstrate appropriate human resources management skills;

(4) Ability to communicate orally and in writing to meet program objectives;

(5) If the position is supervisory in nature, ability to provide or coordinate staff development and training; and

(6) If the position is supervisory in nature, ability to manage and supervise employees.

(6) GS-8

(a) **Experience.** One year of experience comparable to the next lower grade level for the appropriate assignment area and must fully meet the KSAs at that level.

(b) **Assignments.** Employees at this grade level will be assigned to a specific area of medical record/health information, e.g., tumor registry, medical coding, or medical records. They may be in lead or supervisory positions, as appropriate to the assignment. Core competencies for the different assignments are listed with the assignment.

1. Tumor Registry Positions. This is considered to be the full performance level for tumor registry assignments. Certification at this grade level is highly desired. In addition, the candidate must demonstrate the following KSAs:

a. Demonstrated Knowledge, Skills, Abilities

(1) Knowledge of chronic disease registration/data basing and specific cancer registration;

(2) Advanced knowledge of medical terminology, staging of cancer, and requirements of external approving organizations;

(3) Knowledge of the design, conduct, and interpretation of case ascertainment, re-abstracting, and quality assurance studies;

(4) Knowledge of cancer committee processes and procedures in order to improve patient care and to verify compliance;

(5) Ability to serve as subject matter expert on cancer program issues for the medical center and Veterans Integrated Service Network (VISN) administration as tasked; and

(6) Ability to manage priorities and coordinate work in order to complete duties in an accurate and timely fashion.

2. Medical Record Technician (Medical Coder) Positions. This is considered to be the full performance level for this assignment. Certification at this grade level is highly desired. In addition, the candidate must demonstrate the following KSAs:

a. Demonstrated Knowledge, Skills, and Abilities

(1) Ability to analyze the medical record to identify all pertinent diagnoses and procedures for coding, and to evaluate the adequacy of the documentation. This includes the ability to read and understand the content of the medical record, the terminology, the significance of the comments, and the disease process/pathophysiology of the patient;

(2) Skill in reviewing medical record documentation and assigning current versions of the classification systems required in the current position, such as ICD and CPT; and

(3) Advanced knowledge of the full scope of coding and abstracting including inpatient discharges, surgical cases, diagnostic studies and procedures, outpatient encounters, and inpatient professional fees for a highly diversified range of specialties and subspecialties, such as orthopedics, neurosurgery, cardiology, gastroenterology, plastic surgery, spinal cord injury, blind rehabilitation, anesthesia, acute and long term psychiatry including addiction treatment, hospice, ambulatory surgery, and other types of care.

3. Lead or Supervisory Medical Record Technicians. 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. An MRT who is not in a tumor registry or coder position may, as a regular and recurring aspect of the position, be assigned work leader or supervisory duties for a unit of medical record technicians where the highest level of non-supervisory work is at lower grade levels up to and including the full performance level. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs indicated by an asterisk (*):

**PART II
APPENDIX G35****a. Demonstrated Knowledge, Skills, and Abilities**

*(1) Ability to manage priorities and coordinate work in order to complete duties in an accurate and timely fashion;

*(2) Ability to follow-up on pending issues and demonstrate an understanding of the impact of incomplete work;

(3) Ability to demonstrate appropriate human resources management skills;

(4) Ability to delegate authority, evaluate, and oversee staff and programs;

*(5) Ability to accomplish program goals and adapt to changing priorities;

(6) If the position is supervisory in nature, knowledge of, and ability to provide, the full range of supervisory duties which would include responsibility for assignment of work to be performed, performance evaluation, selection of staff, and recommendations of awards, advancements, and, when appropriate, disciplinary actions.

4. Medical Record Technician. 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. There may be some instances of MRTs at the GS-8 grade level who are not assigned to tumor registry, medical coder, lead, or supervisory positions. Such assignments may have varying assignments related to medical records and health data, including review, analysis, extraction, compilation, or abstraction. They may be assigned to record completion, scanning, privacy, revenue, quality assurance, or other areas requiring medical record technician competencies which substantially exceed the full performance level. Regardless of the nature of the specific assignment, the work must be of sufficient scope and complexity to meet the knowledge, skills, and abilities to perform at this grade level.

(7) GS-9

(a) **Experience.** One year of experience comparable to the next lower grade level and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs indicated by an asterisk (*):

(b) **Assignments.** 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. Employees at this level will be assigned to a specific area of medical record/health information (medical records, medical coding or tumor registry). They may be in lead or supervisory positions, as appropriate to the assignment. Core competencies may differ depending on assignment as follows.

1. Tumor Registry Positions. The MRT (Tumor Registry) at this level is responsible for the professional and administrative management of a registry in a relatively large and complex medical center and research program affiliated with a medical school. The complexity of the program and duties of the position must substantially exceed that of positions at the full performance level. Such individuals typically

have responsibility for supervising 3 or more professional full time registrars. In addition to the experience required at the GS-8 grade level, active credentials as a Certified Tumor Registrar are highly desirable. The following knowledge, skills, and abilities are required in addition to the successful demonstration of required KSAs at lower grades.

a. Demonstrated Knowledge, Skills and Abilities

(1) Ability to perform the full range of supervisory duties, including the responsibility for assignment of duties; development of performance standards and performance evaluation; recommendations for appointment, awards, advancement, and when appropriate, disciplinary actions; identification of continuing education and training needs; etc.;

(2) Skill serving as a consultant within the medical center and with other medical center health care staff in evaluating health care delivery to patients, disease incidence, and stratification;

*(3) Ability to assess, plan, and evaluate the registry program to ensure proper coordination between the interdisciplinary and collaborative cancer care team on the overall delivery of health care;

*(4) Ability to independently prepare comprehensive survey applications; and

*(5) Ability to ensure that regulatory requirements are met.

2. Lead Medical Record Technician. Lead MRTs may qualify at the GS-9 grade level by experience, assignment, and demonstrated knowledge, skills and abilities. An MRT at the GS-9 grade level functions as a work leader, as a regular and recurring part of assignments, of medical record technicians, where the highest level of non-supervisory work is at lower grade levels.

a. Demonstrated Knowledge, Skills, and Abilities

*(1) Ability to work with a team to provide technical guidance, plan, organize, and coordinate activities of a medical record function in order to effectively complete job duties of assignment such as distributing workload, monitoring the status and progress of work, monitoring accuracy of work, approving leave, etc.;

*(2) Comprehensive knowledge of medical record technology theories, methods, procedures, and techniques for assigned areas; and

*(3) Ability to communicate tactfully and effectively, both orally and in writing, in order to meet program objectives. This may include preparing reports in various formats and presenting data to various organizational levels.

3. Supervisory Medical Record Technician. Assignment as a supervisor where a significant number of the staff supervised is either at the full performance level of GS-8 or MRTs in career development positions or supervises lower level staff, mixed grade level staff, multiple series staff, mixed shifts, physically dispersed or other issues that add to the complexity of supervision.. The following core competencies are required.

**PART II
APPENDIX G35****a. Demonstrated Knowledge, Skills, and Abilities**

(1) Ability to apply principles and procedures of sound human resources management;

(2) Ability to provide technical and administrative supervision to subordinates in order to meet organizational goals;

*(3) Comprehensive knowledge of medical record technology theories, methods, procedures and techniques for assigned areas;

4. **Medical Record Technicians** at the GS-9 level who are not supervisors or leads may be assigned varying duties related to medical records and health data, including review, analysis, extraction, compilation, or abstraction. They may be assigned to record completion, scanning, privacy, revenue, quality assurance, or other areas requiring such skills. At this grade level, it is expected such assignments would be unique perhaps with great specialization in complex areas such as privacy, coding compliance, medical staff assistance, health information systems, clinical research, and technical education to a broad range of individuals on various complex topics.

a. Demonstrated Knowledge, Skills and Abilities

(1) Ability to collaborate and coordinate tasks with individuals outside the work area and at higher organizational levels who require persuasion and negotiation;

(2) Ability to work independently to accomplish a variety of responsibilities including setting priorities, organizing and adjusting workflows, utilizing problem-solving techniques in the accomplishment of work;

*(3) Ability to apply expert technical knowledge and skills in medical records/health information, HIPAA, or a related area in a complex work environment;

*(4) Comprehensive knowledge of the most complex and difficult medical record technician areas; and

*(5) Knowledge of qualitative and/or quantitative methods for assessment and improvement of medical record functions.

4. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for medical record technicians in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements of the proposed grade.

b. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

APPENDIX G36. DENTAL ASSISTANT QUALIFICATION STANDARD
GS-681
Veterans Health Administration

1. COVERAGE. Following are requirements for appointment as a Dental Assistant in the Veterans Health Administration (VHA). These requirements apply to all VHA dental assistants in the General Schedule (GS)-681 series.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified candidates in accordance with chapter 3, section A, paragraph 3g, this part.)

b. Experience and Education

(1) **Experience.** Six months experience that demonstrates the applicant's ability to perform the work, or provides familiarity with the work.

OR,

(2) **Education.** Successful completion of a 1-year dental assistant program accredited by the American Dental Association's Commission on Accreditation that included a course in radiation physics; radiation biology; radiation health, safety, and protection; X-ray films and radiographic film quality; radiographic techniques; darkroom and processing techniques; and film mounting; or practical nurse training approved by the appropriate State, territory, or District of Columbia accrediting body.

(3) **Experience/Education Combination.** Equivalent combinations of experience and education are qualifying.

c. **Certification.** Public Law 97-35 requires that persons who administer radiologic procedures meet the credentialing standards in 42 CFR Part 75. Essentially, they must have successfully completed an educational program that meets or exceeds the standards described in that regulation, and is accredited by an organization recognized by the Department of Education, and be certified as radiographers in their field.

(1) Alternative Provisions for Certification of Radiologic Competence

(a) Successful completion of the Dental Radiation Health and Safety Examination administered by the Dental Assisting National Board, Inc.;

OR,

(b) Successful completion of the education and training, including coursework in radiation health and safety, described by the Office of Personnel Management (OPM) as fully qualifying for any grade level (copies of certificates of successful completion, plus transcripts or course descriptions of the required subjects must be filed in the employee's official personnel folder);

**PART II
APPENDIX G36****OR,**

(c) Successful completion of the Principles and Practice of Dental Radiology and Radiographic Safety courses and examinations developed by the Assistant Under Secretary for Health for Dentistry. The chief, dental service, will certify competency based on documentation of successful completion of this training, a copy of which will be filed in the personnel folder.

(2) Non-certified applicants who otherwise meet the eligibility requirements for certification of radiologic competence may be given a temporary appointment as a graduate dental assistant under the authority of 38 U.S.C. § 7405 (a) (1) (D). Failure to obtain certification during that period is justification for termination of the temporary appointment. This may result in termination of employment.

(3) Certification in basic life support methods is highly desirable.

(4) **Loss of Credential.** An employee in this occupation who fails to obtain licensure/certification/registration within the required time frame, or who fails to maintain the required licensure/certification/registration must be removed from the occupation, which may also result in termination of employment.

For occupations which require an active credential (licensure/certification/registration) at all grade levels, at the discretion of the appointing official, an employee may be reassigned to another occupation for which he/she qualifies if a placement opportunity exists. For occupations which require an active credential (licensure/certification/registration) in assignments above the full-performance level only, at the discretion of the appointing official, an employee may remain at an appropriate lower grade level in the occupation when both of the following apply: the credential is not a requirement and a placement opportunity exists.

d. Grandfathering Provision. The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation. If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

e. **Physical Requirements.** See VA Directive and Handbook 5019.

f. **English Language Proficiency.** Dental assistants must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS

a. Definitions

(1) Creditable Experience

(a) **Knowledge of Current Professional Dental Assistant Practices.** To be creditable, the experience must have required the use of knowledge, skills, abilities, and other characteristics (also referred to as “core competencies”) associated with current professional dental assisting practice. Evidence of such experience includes graduation from a certified dental assisting training program, experience in private practice, VHA, Department of Defense (DoD), or other federal health care agency.

(b) **Quality of Experience.** Experience is only creditable after the training program certifies that the individual has completed all required courses, an internship if it is part of the program, and graduated with passing grades.

(c) **Part-Time Experience.** Part-time experience as a dental assistant is credited according to its relationship to full-time workweek. For example, a dental assistant would receive 1 week of full-time credit for each 2 weeks of half-time work.

(2) **Internships.** Although not required, dental assistants are encouraged to seek additional experience in an internship program, especially when they may be providing chair side assistance in oral surgery or other specialty care. An internship may qualify a dental assistant for a higher grade as outlined below, but is not required for initial appointment.

b. **Grade Determinations.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates.

**PART II
APPENDIX G36****(1) GS-3**

(a) **Experience or Education.** None beyond the basic requirements.

(b) **Assignment.** Employees at this level serve in dental assistant career development positions. It is expected that they receive guidance from more experienced staff members for more complex patient issues, and require daily close supervision.

(2) GS-4

(a) **Experience or Education.** In addition to the basic requirements, 1 year of experience at the next lower level, OR 2 years of education above high school that included completion of a dental assistant program accredited by the American Dental Association's Commission on Accreditation. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of the use, care, and storage of dental instruments and materials.
2. Basic knowledge of dental procedures and what the patient requires during the procedure.
3. Knowledge of basic oral care.

(c) **Assignment.** Employees at this level serve as staff dental assistants. It is expected that they receive guidance from more experienced staff members for more complex patient issues and require daily and direct contact at the site of work from the assigned supervisor.

(3) GS-5**(a) Experience or Education**

(1) At least 1 year of experience at the next lower grade level that demonstrates the core competencies described at that level. In addition, the candidate must demonstrate the following KSAs:

OR,

(2) Successful completion of a full 4-year course of study that included or was supplemented by completion of a dental assistant program by the American Dental Association's Commission on Accreditation.

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of anatomy and radiological techniques, including safety procedures.
2. Skills in operating dental radiographic machinery.

3. Knowledge of instruments, materials and standardized dental procedures used in all phases of restorative, surgical, endodontics, and periodontic care.

4. Basic knowledge of preventive dentistry measures to instruct patients in proper oral hygiene techniques.

5. Knowledge of dental laboratory procedures to begin the laboratory phase.

6. Basic knowledge of the computerized dental record and privacy requirements related to the maintenance and restriction of release of information from the record.

7. Basic knowledge of Occupational Safety & Health Administration (OSHA) standards for clinical and laboratory operations.

(c) **Assignment.** Employees at this level serve as staff dental assistants at the full performance level for more routine patient care and perform some complex patient procedures under general supervision of more experienced dental assistants or dental supervisor.

(4) **GS-6**

(a) **Experience.** At least 1 year of experience at the next lower grade level that demonstrates the core competencies described at that level. In addition, the candidate must demonstrate the technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of instruments, materials and standardized dental procedures used in the specialty of oral and maxillofacial surgery.

2. Knowledge of anatomy of the oral structures and an understanding of the surgical procedures performed.

*3. Advanced knowledge Occupational Safety & Health Administration (OSHA) standards for clinical and laboratory operations.

*4. For supervisory positions, ability to lead and/or supervise less experienced dental assistants.

(c) **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. Employees at this level serve in staff dental assistant positions independently performing more complex work in assigned specialties while receiving general administrative supervision, or in lead, or supervisory dental assistant positions.

**PART II
APPENDIX G36****(5) GS-7**

(a) **Experience.** At least 1 year of experience at the next lower grade level that demonstrates the core competencies described at that level. In addition, the candidate must demonstrate the technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of instruments, materials, and procedures used in all specialties of dentistry.
2. Knowledge of impression materials and procedures for impressions.
3. Knowledge of laboratory procedures, materials, and methods, including safety and proper handling.
4. Knowledge of computerized dental patient records systems, and their application to dental patients, to include approved abbreviations and the format for completion of progress notes.
- *5. For supervisory positions, ability to manage resources, e.g., space, equipment, supplies, personnel, etc.

(c) **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. Employees at this level serve in lead or supervisory dental assistant assignments. Dental assistants must be extremely familiar with all specialty procedures including operating room dental assisting, laboratory procedures, pouring models, making trays, and provisional restorations. Assignments include advance use of the computerized dental patient records system to include initiating patient consults, storing and viewing images, entry of diagnostic data, setting up for treatment planning and presentation to the patient, and providing training to staff dental assistants to effectively use the computerized record system.

4. DEVIATIONS

- a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for dental assistants in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements on the proposed grade.
- b. Under no circumstances will the certification requirements of radiologic competence be waived.
- c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402; 7403.

**APPENDIX G37. DENTAL HYGIENIST QUALIFICATION STANDARD
GS-682**

Veterans Health Administration

1. COVERAGE. The following are requirements for appointment as a Dental Hygienist in the Veterans Health Administration (VHA). These requirements apply to all VHA dental hygienists in the General Schedule (GS)-682 series.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified candidates in accordance with chapter 3, section A, paragraph 3g, this part.)

b. **Licensure.** Applicants must be currently licensed to practice as a dental hygienist with a full, current, and unrestricted license in a State, Territory, or Commonwealth, or the District of Columbia.

c. Certification

(1) Public Law 97-35 requires that persons who administer radiologic procedures meet the credentialing standards in 42 CFR Part 75. Essentially, they must have successfully completed an educational program that meets or exceeds the standards described in that regulation, and is accredited by an organization recognized by the Department of Education, and be certified as radiographers in their field.

(2) Non-certified applicants who otherwise meet the eligibility requirements for licensure may be given a temporary appointment as a graduate Dental Hygienist under the authority of 38 U.S.C. § 7405 (a) (1) (D). Failure to obtain licensure during that period is justification for termination of the temporary appointment. This may result in termination of employment.

(3) Certification in basic life support methods is highly desirable.

(4) **Loss of Credential.** An employee in this occupation who fails to obtain licensure/certification/registration within the required time frame, or who fails to maintain the required licensure/certification/registration must be removed from the occupation, which may also result in termination of employment.

For occupations which require an active credential (licensure/certification/registration) at all grade levels, at the discretion of the appointing official, an employee may be reassigned to another occupation for which he/she qualifies if a placement opportunity exists. For occupations which require an active credential (licensure/certification/registration) in assignments above the full-performance level only, at the discretion of the appointing official, an employee may remain at an appropriate lower grade level in the occupation when both of the following apply: the credential is not a requirement and a placement opportunity exists.

d. **Grandfathering Provision.** The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

**PART II
APPENDIX G37**

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

e. **Physical Requirements.** See VA Directive and Handbook 5019.

f. **English Language Proficiency.** Dental hygienists must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS**a. Definitions****(1) Creditable Experience**

(a) **Knowledge of Current Professional Dental Hygienist Practices.** To be creditable, the experience must have required the use of knowledge, skills, abilities, and other characteristics (also referred to as “core competencies”) associated with current professional dental hygiene practice. Evidence of such experience includes experience in private practice, or local/state/federal health care facilities.

(b) **Quality of Experience.** Experience in private practice and with local/state/federal health care facilities must be verified with the practitioner or the supervising officers.

(c) **Part-Time Experience.** Part-time experience as a dental hygienist is credited according to its relationship to full-time workweek. For example, a dental hygienist would receive 1 week of full-time credit for each 2 weeks of half-time work.

b. **Grade Determinations.** In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates.

(1) **GS-4**

(a) **Experience.** None beyond the basic requirements.

(b) **Assignment.** Employees at this level serve in a dental hygienist career development position. It is expected that they receive guidance from more experienced staff members for patient issues, and require daily close supervision.

(2) **GS-5**

(a) **Experience or Education.** In addition to the basic requirements, 1 year of experience at the next lower level, OR completion of a 4-year course of study leading to a bachelor's degree in dental hygiene or in a directly related field of study. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to communicate orally and in writing with a variety of people from diverse backgrounds.
2. Knowledge of oral anatomy, physiology, histology, periodontology, nutrition, pharmacology, microbiology, principles and techniques of dental hygiene, oral disease etiology, preventive dentistry, diet counseling, dental instruments, and dental materials.
3. Knowledge of radiation protection standards devices and techniques including concepts of accumulated dosage and genetic changes, effects of radiation on living organisms, and the effects of X-ray techniques on patient and operator exposure in order to assure that adequate safeguards are maintained.

(c) **Assignment.** Employees at this level serve in a career development position as staff dental hygienists. It is expected that they receive relatively less guidance from more experienced staff members and require daily supervision at the site of work.

(3) **GS-6**

(a) **Experience.** At least 1 year of experience at the next lower grade level that demonstrates the core competencies described at that level. In addition, the candidate must demonstrate the following KSAs:

(b) **Demonstrated Knowledge, Skills, and Abilities**

**PART II
APPENDIX G37**

1. Knowledge of advanced oral prophylactic, therapeutic, and preventive procedures in cases of periodontal diseases, or inflammation, or on patients with other medical and/or dental problems;
2. Ability to use communication techniques to persuade and inform individuals and groups; and
3. Knowledge of dental methods and techniques used in performing intra and extra oral procedures.

(c) **Assignment.** Employees at this level serve as staff dental hygienists. It is expected that they receive guidance from more experienced staff members for more complex patient issues and require daily and direct contact at the site of work from the assigned supervisor.

(4) GS-7

(a) **Experience.** At least 1 year of experience at the next lower grade level that demonstrates the core competencies described at that level. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of oral pathology to include disease of the hard and soft tissues, disorders of tooth structure, developmental and congenital anomalies, salivary gland disorders, symptoms of infectious disorders, and appropriate protocols;
2. Practical knowledge of medical diseases and conditions such as cancer, HIV, radiation therapy, diabetes, cardiovascular diseases, bulimia, anorexia, pregnancy, and chronic and degenerative diseases as they relate to dental health and treatment; and
3. Knowledge of radiographic exposure techniques in order to produce radiographs of high diagnostic quality with a minimum of retakes.

(c) **Assignment.** Employees at this level serve as staff dental hygienists. It is expected that they perform more complex work while receiving less frequent supervision than at the GS-6 level.

(5) GS-8

(a) **Experience.** At least 1 year of experience at the next lower grade level that demonstrates the core competencies described at that level. In addition, the candidate must demonstrate the following KSAs:

(b) Demonstrated Knowledge, Skills, and Abilities

1. Knowledge of state of the art preventive dentistry measures for patient instruction and training;
2. Knowledge of anatomy and physiology in order to interpret the examination request accurately; to understand the functioning and interrelationship of the various organs appearing on the film and the various stages of the examination to judge the acceptability of the radiograph for diagnostic use; and to correctly mount them for viewing;

3. Skill in providing individual and group oral health care instructions to inpatients, outpatients, Nursing Home Care Unit patients, etc.; and

4. Knowledge of VA, Joint Commission on Accreditation of Healthcare Organizations (JCAHO), Occupational Safety and Health Administration (OSHA), and related regulations and guidelines pertaining to dental matters.

(c) **Assignment.** Employees at this level serve as staff dental hygienists at the full performance level, receiving little to no guidance from more experienced staff members for more complex patient issues, and require general supervision.

(6) **GS-9**

(a) **Experience.** At least 1 year of experience at the next lower grade level that demonstrates the core competencies described at that level. In addition, the candidate must demonstrate the following technical KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Skill in performing specialized prophylactic and preventive dental hygiene procedures;

2. Ability to independently perform expanded dental functions under the technical guidance of a professional dentist;

*3. Skill in providing individual and group oral health care instructions to patients and other staff regarding the practice of effective oral hygiene techniques; and

*4. Skill in presenting oral hygiene lectures and demonstrations, and developing training materials.

(c) **Assignments.** 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. Candidates at this grade level serve as (1) staff dental hygienists performing advanced clinical techniques, or serve as instructors for a dental hygiene program, or (2) in a lead or supervisory capacity for lower graded dental hygienist and/or dental assistants. Employees plan, coordinate, and conduct preventive oral health programs for various patient groups; develop and modify instructional methods; and develop methods for evaluating the effectiveness of the preventive dentistry program. Employees work closely with, and under the general direction of, a dentist or periodontist.

4. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for dental hygienists in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements on the proposed grade.

b. Under no circumstances will the licensure or certification requirements of radiologic competence be waived.

c. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.

**APPENDIX G38. BIOMEDICAL ENGINEER QUALIFICATION STANDARD
GS-858****Veterans Health Administration**

1. COVERAGE. This standard applies to all biomedical engineer positions in the Veterans Health Administration (VHA). The work requires the application of engineering concepts and methodology to investigate problems and phenomena of living systems to advance the understanding of these systems and improve medical practices; to develop materials, instruments, diagnostic and therapeutic devices, and other equipment applicable in the study of life systems and the practice of medicine; and to improve health service delivery systems for communities and within individual VA facilities (medical centers, outpatient clinics, domiciliaries). Biomedical engineering work requires, in addition to knowledge and skill in engineering disciplines, a background in physiology and anatomy, and a practical facility in specialized subject matter areas such as computer applications, electronics, or mathematics.

2. BASIC REQUIREMENTS

a. **Citizenship.** Citizen of the United States. (Non-citizens may be appointed when it is not possible to recruit qualified citizens in accordance with chapter 3, section A, paragraph 3g, this part.)

b. Education and/or Experience

(1) **Bachelor's degree: Professional engineering.** To be acceptable, the curriculum must: (a) Be in a school of engineering with at least 1 curriculum accredited by the Accreditation Board for Engineering and Technology (ABET) as a professional engineering curriculum; or, (b) Include differential and integral calculus, and courses (more advanced than first-year physics and chemistry) in 5 of the following 7 areas of engineering science or physics: (1) statics and/or dynamics; (2) strength of materials (stress-strain relationships); (3) fluid mechanics and/or hydraulics; (4) thermodynamics; (5) electrical fields and circuits; (6) nature and properties of materials (relating particle and aggregate structure to properties); or (7) any other comparable area of fundamental engineering science or physics, such as optics, heat transfer, soil mechanics, or electronics.

OR,

(2) **Combination of education and experience:** College-level education, training, and/or technical experience that furnished: [a] a thorough knowledge of the physical and mathematical sciences underlying professional engineering; and [b] a good understanding, both theoretical and practical, of the engineering sciences and techniques and their applications to 1 of the branches of engineering. The adequacy of such background must be demonstrated by 1 of the following:

1. Professional registration: Current registration as a professional engineer by any State, Territory, Commonwealth of the United States (e.g., Puerto Rico), or the District of Columbia. Absent other means of qualifying under this standard, those applicants who achieved such registration by means other than a written test (e.g., State grandfather or eminence provisions) are eligible only for positions that are within or closely related to the specialty field of their registration. For example, an applicant who attains registration through a State board's eminence provision as a manufacturing engineer typically would not be rated eligible for biomedical engineering positions.

**PART II
APPENDIX G38**

2. Written Test: Evidence of having successfully passed the Engineer-in-Training (EIT) examination, or the written test required for professional registration, which is administered by the Boards of Engineering Examiners of a State, Territory, Commonwealth of the United States (e.g., Puerto Rico), or the District of Columbia.

Applicants who have passed the EIT examination and have completed all the requirements for either [a] a bachelor's degree in engineering technology (BET) from an accredited college of university that included 60 semester hours of courses in the physical, mathematical, and engineering sciences, OR, [b] a BET from a program accredited by the Accreditation Board for Engineering and Technology (ABET) may be rated eligible for certain engineering positions at GS-5. Eligibility is limited to positions that are within, or closely related to, the specialty field of the engineering technology program. Applicants for positions that involve highly technical research, development, or similar functions requiring an advanced level of competence in basic science must meet the basic requirements in paragraph 2.b.(1).

Because of the diversity in kind and quality of BET programs, graduates of other BET programs are required to complete at least 1 year of additional education or highly technical work experience of such nature as to provide reasonable assurance of the possession of the knowledge, skills, and abilities required for professional engineering competence. The adequacy of this background must be demonstrated by passing the EIT examination.

3. Specified academic courses: Successful completion of at least 60 semester hours of courses in the physical, mathematical, and engineering sciences and in engineering that included the courses specified in the basic requirements. The courses must be fully acceptable toward meeting the requirements of a professional engineering curriculum as described in paragraph 2.b(1).

4. Related curriculum. Successful completion of a curriculum leading to a bachelor's degree in engineering technology or in an appropriate professional field, e.g., physics, chemistry, architecture, computer science, mathematics, hydrology, or geology, may be accepted in lieu of a degree in engineering, provided the applicant has had at least 1 year of professional engineering experience acquired under professional engineering supervision and guidance. Ordinarily, there should be either an established plan of intensive training to develop professional engineering competence, or several years of prior professional engineering-type experience, e.g., in interdisciplinary positions. (The above examples of related curricula are not all-inclusive.)

c. Grandfathering Provision. The following is the standard grandfathering policy for all Title 38 hybrid qualification standards. Some of these provisions may not apply to this occupation. Please carefully review the qualification standard to determine the specific education and/or licensure/certification/registration requirements that apply to this occupation.

All persons employed in VHA in this occupation on the effective date of this qualification standard are considered to have met all qualification requirements for the title, series and grade held, including positive education and licensure/certification/registration 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 to it, the following provisions apply:

Such employees in an occupation that does not require a licensure/certification/registration, may be reassigned, promoted, or demoted within the occupation.

Such employees in an occupation that requires a licensure/certification/registration, may be reassigned, promoted up to and including the full performance (journey) level, or demoted within the occupation, but may not be promoted beyond the journey level or placed in supervisory or managerial positions.

Such employees in an occupation that requires a licensure/certification/registration only at higher grade levels must meet the licensure/certification/registration requirement before they can be promoted to those higher grade levels.

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.

Employees initially grandfathered into this occupation, who subsequently obtain additional education and/or licensure/certification/registration that meet all the basic requirements of this qualification standard must maintain the required credentials as a condition of employment in the occupation.

If an employee who was retained in an occupation listed in 38 U.S.C. § 7401(3) under this provision leaves that occupation, the employee loses protected status and must meet the full VA qualification standard requirements in effect at the time of reentry to the occupation.

d. **Physical Requirements.** See VA Directive and Handbook 5019.

e. **English Language Proficiency.** Biomedical engineers must be proficient in spoken and written English in accordance with chapter 2, section D, paragraph 5a, this part.

3. GRADE REQUIREMENTS

a. Definitions

(1) Professional Engineering Experience

(a) Professional knowledge of engineering is defined as the comprehensive, in depth, knowledge of mathematical, physical, and engineering sciences applicable to a specialty field of engineering that characterizes a full 4-year professional engineering curriculum leading to a bachelor's degree, or the equivalent.

(b) Professional ability to apply engineering knowledge is defined as the ability to:

1. Apply fundamental and diversified professional engineering concepts, theories, and practices to achieve engineering objectives with versatility, judgment, and perception;

2. Adapt and apply methods and techniques of related scientific disciplines; and

**PART II
APPENDIX G38**

3. Organize, analyze, interpret, and evaluate scientific data in the solution of engineering problems.

(2) **Part-time Experience.** Part-time experience as a professional biomedical engineer is credited according to its relationship to a full-time workweek. For example, a biomedical engineer would receive 1 week of full-time credit for each 2 weeks of half-time work.

b. Grade Determinations. In addition to the basic requirements for employment, the following criteria must be met when determining the grade of candidates.

(1) **GS-5**

(a) **Experience.** None beyond the basic requirements. Meeting these requirements should demonstrate the following:

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of, and ability to apply, the principles, theories, concepts, and practices of the engineering profession.

2. Skill to effectively communicate both orally and in writing with a wide variety of individuals, including communicating highly technical information.

3. Knowledge of, and ability to interpret and apply, relevant codes, regulations, guidelines, and standards associated with engineering.

4. Ability to analyze organizational and operational problems and develop timely and economical solutions.

5. Ability to keep abreast of changes in technology and to utilize information gained in the solution of engineering problems.

(c) **Assignment.** Employees at this grade level serve in career development positions.

(2) **GS-7**

(a) **Experience.** In addition to the basic requirements, 1 year of experience equivalent to the next lower level. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Advanced Entry Level Placement.** See VA Handbook 5005, Appendix G.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Ability to prepare written and graphic presentations for other technical staff including technicians and other junior engineers.

2. Knowledge of relevant codes, regulations, guidelines, and standards.
3. Ability to learn organizational concepts to meet operational needs.
4. Ability to learn new technology and identify changes and trends for presentation to other technical staff.

(d) **Assignment.** Employees at this level are in career development positions with the close supervision of higher-level biomedical engineers.

(3) **GS-9**

(a) **Experience.** At least 1 year of specialized experience equivalent to the next lower level. In addition, the candidate must demonstrate the following KSAs:

OR,

(b) **Education.** Education equivalent to 2 full years of progressively higher level graduate education or master's or equivalent graduate degree in a field of engineering, e.g., biomedical engineering, general engineering, mechanical engineering, etc., provided the applicant's total background demonstrates the core competencies for GS-9 level assignment.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of the principles, theories, concepts, and practices of the biomedical engineering profession.
2. Knowledge of relevant codes, regulations, guidelines, and standards, and the ability to make recommendations to assure compliance with medical center programs.
3. Knowledge of organizational concepts and an understanding of the operational needs of other administrative hospital services.
4. Ability to prepare material on current technical topics and trends for presentation to other technical staff and mid-level hospital management, and the ability to keep abreast of changes in technology.

(d) **Assignment.** Employees at this level complete technical assignments in the engineering field as assigned by senior engineers, and will be required to rotate through, and participate in, the operations of other administrative hospital services. At the GS-9 level, employees will function at a more independent level with oversight by a supervisor for more complex assignments.

(4) **GS-11**

(a) **Experience.** At least 1 year of experience equivalent to the next lower level. In addition, the candidate must demonstrate the following KSAs:

**PART II
APPENDIX G38**

OR,

(b) **Education.** Three full years of progressively higher-level graduate education or a Ph.D. or equivalent doctoral degree in biomedical engineering or a related engineering field, provided the applicant's total background demonstrates evidence of knowledge, skills, and abilities necessary to perform the work of the position to be filled.

(c) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of an equipment management program that meets current Joint Commission on the Accreditation of Health Care Organizations (JCAHO) and National Fire Protection Association (NFPA) requirements.

2. Ability to develop material for a continuing education program for clinical staff that addresses the principles and application of medical instrumentation used in the delivery of healthcare.

3. Ability to advise clinical and administrative staff on emerging medical engineering technology, while keeping abreast of changes in such technology, and utilizing the information to solve biomedical engineering problems.

(d) **Assignment.** At this level, employees will function on an independent basis at the full performance level; will participate in medical device hazard investigations to assure compliance with patient safety goals, the Safe Medical Devices Act (SMDA), and JCAHO requirements; and will assist in the development of an equipment management program at the medical center. At this level, employees may assist in clinical research projects in the biomedical engineering field.

(5) **GS-12**

(a) **Experience.** Completion of at least 1 year of specialized experience equivalent to the next lower level; or completion of a post-doctoral research fellowship in the field of biomedical engineering, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

*1. Ability to conduct an equipment management program that meets current JCAHO and NFPA requirements.

*2. Ability to develop a curriculum for a continuing education program that addresses the safe and effective use of medical equipment and/or technology.

*3. Ability to manage a recall and safety alert program for medical devices including medical device hazard investigations to assure compliance with patient safety goals, SMDA, and JCAHO requirements.

4. Skill in advising clinical and administrative staff on medical engineering technology, including existing and emerging technology and which addresses viability, long-term suitability, compatibility, and/or safety.

*5. Ability to analyze organizational and operational problems and recommend timely and economical solutions involving medical equipment spanning initial concept, installation, and effective implementation of complex medical equipment.

(d) **Assignment.** At this level, employees may be in non-supervisory or supervisory positions. 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.

1. Biomedical Engineer (Clinical). Non-supervisory employees support and advance patient care by applying engineering and managerial skills to healthcare technology as demonstrated by at least 3 of the following major responsibilities:

a. Conducting an equipment management program that meets current JCAHO and NFPA requirements. The breadth of technology is less than is typically present at a tertiary care and/or university-affiliated institution.

b. Assuring the provision of a continuing education program for clinical staff addressing the principles and application of medical instrumentation used in the delivery of healthcare. This requires skill to effectively communicate, both orally and in writing, with a wide variety of individuals, including technical and professional clinical staff, to communicate technical information.

c. Managing a recall and safety alert program for medical devices, including medical device incident investigations to assure compliance with patient safety goals, SMDA, and JCAHO requirements.

d. Advising clinical and administrative staff on medical engineering technology including existing and emerging technology addressing viability, long-term suitability, compatibility, and/or safety while keeping abreast of changes in technology and utilizing information gained in the solution of biomedical engineering problems.

e. Assisting with capital asset and infrastructure planning for medical equipment spanning initial concept, installation, and effective implementation of complex medical equipment.

f. Functioning as the subject matter expert in the field of biomedical engineering who directly supports specialized clinical technology including service, system administration, training, and quality assurance at a medical center.

2. Supervisory Biomedical Engineer. The supervisory biomedical engineer is responsible for the professional and administrative management of a biomedical engineering section in a facility with complexity equal to a secondary care facility. Such individuals typically have responsibility for supervising technical staff including lower level engineers, biomedical engineering technicians, and other staff. The range of supervisory responsibility includes development of performance standards and performance evaluations; recommendations for appointments, awards, advancements, and when appropriate, disciplinary

**PART II
APPENDIX G38**

actions; and identification of continuing training needs; etc. The supervisory biomedical engineer is responsible for financial management of budget resources allocated to support quality assurance, and maintenance activities necessary to assure the facility medical equipment inventory is available for patient care activities. In addition to the core competencies for GS-12 level positions, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

- a. Ability to organize work, set priorities, delegate tasks, and meet multiple deadlines.
- b. Skill in managing and directing the work of others to accomplish programs goals and objectives.
- *c. Ability to translate management goals and objectives into well-coordinated and controlled biomedical work operations.
- d. Ability to deal effectively with individuals or groups representing widely divergent backgrounds, interests, and points of view.

(6) GS-13

(a) **Experience.** Completion of at least 1 year of experience equivalent to the next lower level, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) Demonstrated Knowledge, Skills, and Abilities

- *1. Ability to conduct capital asset and infrastructure planning for medical equipment spanning initial concept, installation, and effective implementation of complex medical equipment.
- *2. Knowledge of the most complex and specialized clinical technology including service, system administration, training, and quality assurance.
3. Expert knowledge of, and the ability to interpret and apply, complex codes, regulations, guidelines, and standards associated with the biomedical engineering field.

(c) **Assignment.** At this level, employees may be in non-supervisory, supervisory, or research positions. 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.

1. Biomedical Engineer (Clinical): Supports and advances patient care by applying engineering and managerial skills to healthcare technology as demonstrated by at least 4 of the following major responsibilities:

- a. Responsibility for an equipment management program that meets current JCAHO and NFPA requirements. The breadth of technology is typical of a tertiary care and/or university-affiliated institution.

b. Assures provision of a continuing education program for clinical staff addressing the principles and application of medical instrumentation used in the delivery of health care. This includes a curriculum that addresses the safe and effective use of medical equipment and/or technology.

c. Manages a recall and safety alert program for medical devices, including medical device incident investigations to assure compliance with patient safety goals, SMDA, and JCAHO requirements.

d. Serves as advisor to senior clinical and leadership staff on medical engineering technology (including existing and emerging technology) addressing viability, long-term suitability, compatibility, and/or safety.

e. Conducts capital asset and infrastructure planning for medical equipment spanning initial concept, installation, and effective implementation of complex medical equipment.

f. Serves as institutional expert who directly supports the most complex and specialized clinical technology including service, system administration, training, and quality assurance.

2. Supervisory Biomedical Engineer (Clinical). The supervisory biomedical engineer (clinical) is responsible for the professional and administrative management of a biomedical engineering section in a tertiary care and/or university-affiliated facility. Such individuals typically have responsibility supervising technical staff including lower level engineers, biomedical engineering technicians, and other staff. The range of supervisory responsibility includes development of performance standards and performance evaluations; recommendations for appointments, awards, advancements, and when appropriate, disciplinary actions; and identification of continuing training needs; etc. The supervisory biomedical engineer (clinical) is responsible for financial management of budget resources allocated to support quality assurance, and maintenance activities necessary to assure the facility medical equipment inventory is available for patient care activities. In addition to the core competencies for GS-13 level positions, the supervisory biomedical engineer (clinical) must demonstrate the following professional KSAs and potential to acquire the assignment specific KSAs designated by an asterisk (*):

a. Ability to initiate new ideas and approaches, and demonstrate resourcefulness.

*b. Ability to manage resources, i.e., space, equipment, supplies, staff, at the local level.

*c. Ability to draft and/or recommend local policies and/or directives.

d. Skill in managing a biomedical engineering program at the local level.

3. Biomedical Engineer (Research). The biomedical engineer (research) is responsible for conducting biomedical research involving significant engineering concepts and applications as an investigator; serving as senior author in the preparation of manuscripts published in peer-reviewed archival journals; serving as principal investigator on competitive research proposals for funding by Federal and non-Federal peer reviewed sources; and disseminating research findings at the local facility, and interacting with clinicians and clinical biomedical engineers. In addition to the core competencies for the GS-13 level, the biomedical engineer (research) must demonstrate the following professional KSAs and potential to acquire the assignment specific KSAs designated by an asterisk (*):

PART II
APPENDIX G38

- a. Knowledge of, and ability to apply, appropriate scientific methods in the design and execution of basic and applied research in the field of biomedical engineering.
- b. Ability to coordinate work across multiple settings, e.g., medical centers, universities.
- c. Ability to convey scientific biomedical engineering concepts and methodology to individuals with diverse levels of technical expertise.

(7) GS-14

(a) **Experience.** Completion of at least 1 year of experience equivalent to the next lower level, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and demonstrate the potential to acquire the assignment specific KSAs designated by an asterisk (*):

(b) Demonstrated Knowledge, Skills, and Abilities

1. Advanced knowledge of, and ability to interpret and apply, relevant codes, regulations, guidelines, and standards associated with biomedical engineering to support the needs of 1 or more facility.

2. Ability to effectively communicate both orally and in writing with a wide variety of individuals, including technical and professional clinical staff, to convey highly technical information.

*3. Ability to manage a recall and safety alert program for medical devices, medical device incident investigations to assure compliance with patient safety goals, SMDA, and JCAHO requirements.

*4. Advanced knowledge of, and ability to apply, the principles, theories, concepts, and practices of biomedical engineering. This would include the ability to keep abreast of changes in technology and utilize the information gained in the solution of biomedical engineering problems to meet operational needs.

*5. Ability to directly support the most complex and specialized clinical technology including service, system administration, training, and quality assurance.

(c) **Assignment.** At this level, employees may be in non-supervisory, supervisory, or research positions. 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.

1. **Biomedical Engineer (Clinical).** Supports and advances patient care by applying engineering and managerial skills to healthcare technology as demonstrated by at least 4 of the following major responsibilities:

a. Conducts an equipment management program that meets current JCAHO and NFPA requirements. The breadth of technology is typical of a tertiary care and/or university-affiliated institution. Evaluates other programs in the Veterans Integrated Service Network (VISN), or for the national program office.

b. Assures provision of a continuing education program for professional staff addressing the principles and application of medical instrumentation used in the delivery of healthcare. This includes a curriculum that addresses the safe and effective use of medical equipment and/or technology. Provides continuing education beyond the facility including the VISN and/or the national program office, or teaches at a higher learning institution.

c. Manages a recall and safety alert program for medical devices, including medical device incident investigations to assure compliance with patient safety goals, SMDA, and JCAHO requirements. Analyzes recall and safety alert programs for other medical centers and/or conducts medical equipment investigations for the VISN or national program office.

d. Serves as advisor to senior clinical and leadership staff on medical technology, including existing and emerging technology, addressing viability, long-term suitability, compatibility, and/or safety. Serves as technology advisor to assist VISN with technology management and assessment.

e. Conducts capital asset and infrastructure planning for medical equipment spanning initial concept, installation, and effective implementation of complex medical equipment. Participates at the VISN and/or national level with capital asset planning. Analyzes organizational and operational problems and develops timely and economical solutions to meet facility, VISN, and/or national needs.

f. Serves as institutional expert who directly supports the most complex and specialized clinical technology including service, system administration, training, and quality assurance for multiple sites.

2. Supervisory Biomedical Engineer (Clinical). The supervisory biomedical engineer (clinical) is responsible for the professional and administrative management of a biomedical engineering section in a facility with complexity equal to a tertiary care and/or university-affiliated facility. Such individuals typically have responsibility for supervising technical staff including engineers, biomedical engineering technicians, and other technical staff. The range of supervisory responsibility includes development of performance standards and performance evaluations; recommendations for appointment, awards, advancements, and when appropriate, disciplinary actions; and identification of continuing training needs; etc. At this level, the supervisor is responsible for financial management of budget resources allocated to support quality assurance and maintenance activities necessary to assure the facility medical equipment inventory is available for patient care activities.

At this level the supervisory biomedical engineer (clinical), is assigned oversight responsibility to establish operating policy for other professional engineers at the facility and/or other professional engineers in the VISN. In addition to the core competencies for the GS-14 level, the supervisory biomedical engineer (clinical) must demonstrate the following professional KSAs and potential to acquire the assignment specific KSAs designated by an asterisk (*):

a. Skill in interpersonal relationships including conflict resolution.

*b. Ability to work collaboratively with other disciplines, upper management, VHA Central Office, and/or VISN level staff.

*c. Ability to implement national policies.

**PART II
APPENDIX G38**

d. Ability to develop and recommend new or revised policies that are consistent with organizational goals and objectives.

3. Biomedical Engineer (Research). At this level, the biomedical engineer (research) designs and supervises biomedical research projects including the assembly and supervision of an investigative team; has a record of publication as senior author on manuscripts published in peer-reviewed archival journals; participates in the peer-review of manuscripts in archival journals; has a record of funded competitive research proposals by Federal or non-Federal peer-reviewed sources; disseminates research findings at the VISN, national, and international level; and participates in the mentorship and training of junior researchers and investigators. In addition to the core competencies for the GS-14 level, the biomedical engineer (research) must demonstrate the following professional KSAs and potential to acquire the assignment specific KSAs designated by an asterisk (*):

a. Ability to provide formal clinical, research, and/or educational consultation to multidisciplinary staff.

b. Knowledge of the legal, ethical, and professional standards applicable to clinical research in the field of biomedical engineering.

*c. Knowledge of budget control procedures that including funding from multiple sources and may vary annually.

(8) **GS-15.** The Under Secretary for Health, or designee, may approve the assignment of a biomedical engineer at the GS-15 level when the composite record of qualifications, scope, and complexity of the assignment justify such action.

(a) **Experience.** Completion of at least 1 year of experience equivalent to the next lower level, and must fully meet the KSAs at that level. In addition, the candidate must demonstrate the following professional KSAs and potential to acquire the assignment specific KSAs designated by an asterisk(*):

(b) **Demonstrated Knowledge, Skills, and Abilities**

1. Knowledge of, and ability to interpret and apply, relevant codes, regulations, guidelines, and standards associated with biomedical engineering to establish criteria on a national basis for biomedical engineering programs.

2. Ability to effectively communicate, both orally and in writing, on technical information with a wide variety of individuals including senior VHA managers.

*3. Knowledge of, and ability to apply, the principles, theories, concepts, and practices of the biomedical engineering profession to establish a national recall and safety alert program, and/or conduct medical equipment investigations for the national program office.

(c) **Assignment.** At this level, employees may be in non-supervisory, supervisory, or research positions. 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.

1. Biomedical Engineer (Clinical). The biomedical engineer (clinical) supports and advances patient care by applying engineering and managerial skills to healthcare technology as demonstrated by the following major responsibilities:

- a. Establishes national criteria for conduct of an equipment management program that meets current JCAHO and NFPA requirements; manages a national center for engineering programs that provides solutions to medical technology and biomedical engineering issues; or conducts a multi-medical center equipment management program and serves as a national expert in biomedical engineering and evaluates other programs in the VISN or for the national program office.
- b. Assures provision of a continuing education program for professional staff addressing the principles and application of medical instrumentation used in the delivery of healthcare. This includes a curriculum that addresses the safe and effective use of medical equipment and/or technology. Develops and organizes training for the VISN and national level for professional engineering, and other medical center staff as appropriate on engineering topics.
- c. Establishes a national recall and safety alert program for medical devices, including medical device incident investigations, consistent with patient safety goals and compliant with SMDA and JCAHO requirements; or analyzes recall and safety alert programs for multiple medical centers and conducts medical equipment investigations for the VISN as well as high profile medical equipment investigations for the national program office.
- d. Works with clinical programs at the national level to identify medical equipment needs and priorities, and determine maintenance and quality assurance requirements. Participates in technology assessment activities for the Under Secretary for Health; or serves as advisor to senior clinical and leadership staff on medical engineering technology (including existing and emerging technology) for multiple sites addressing viability, long-term suitability, compatibility, and/or safety. Participates in technology assessment to support national program office requirements.
- e. Represents VHA capital asset and infrastructure planning for medical equipment at the national level. Reviews all requests for major medical equipment systems to assure they meet economic and workload requirements established by VA and good clinical practice; or reviews VISN requests for major medical equipment systems to assure they meet VISN economic and workload requirements, and assists with capital asset review at the national level.

2. Biomedical Engineer (Research). At this level the biomedical engineer (research) assembles, maintains, and guides broad-based research efforts involving multiple independently funded investigators; maintains a competitive publication record achieving national and/or international recognition for research accomplishments; serves as a principal investigator on multiple research projects funded by Federal and/or non-Federal sources; serves as a principal investigator on programs or center research proposals for funding by Federal or non-Federal peer-reviewed sources; designs and supervises a mentoring and career development program for junior researchers and investigators; and participates in editorial decisions or serves on the editorial board of an archival journal, and/or is involved in research grant proposal peer-review and/or in regional or national research policy development. An employee achieving the academic rank at the full professor level at an affiliated university's promotion and tenure committee may demonstrate this

recognition. In addition to the core competencies for the GS-15 level, the biomedical engineer (research) must demonstrate the following professional KSAs and potential to acquire the assignment specific KSAs designated by an asterisk (*):

a. Ability to balance responsibilities in an extremely complex environment and to work with great autonomy.

*b. Ability to independently create, organize, manage, and maintain high-quality research programs.

*c. Knowledge of budget control procedures that include funding from multiple sources which may vary annually.

4. DEVIATIONS

a. The appointing official may, under unusual circumstances, approve reasonable deviations to the grade determination requirements for biomedical engineers in VHA whose composite record of accomplishments, performance, and qualifications, as well as current assignments, warrant such action based on demonstrated competence to meet the requirements of the proposed grade.

b. The placement of individuals in grade levels not described in this standard must be approved by the Under Secretary for Health, or designee, in VHA Central Office.

Authority: 38 U.S.C. §§ 7402, 7403.]