

Subspecialty Radiology Qualification Standards

Statement of Purpose:

To outline qualification standards for imaging subspecialists in order to provide the most accurate, definitive, and directive interpretation possible.

Introduction:

Because of significant advances in imaging technology, the complexity of imaging procedures performed has increased dramatically. This increase in complexity has placed tremendous demands on the radiologist, who must understand the anatomy, imaging modality technology, and clinical issues, as well as medical and surgical options for all conditions or disease processes. It is no longer possible for any individual radiologist to master and maintain the expertise and depth of knowledge required to provide the highest quality interpretation across all modalities and all body parts. Therefore, radiologists must narrow their scope of practice (modality and body part) and acquire significant experience (volume of cases) in that selected narrow field or subspecialty in order to provide a consistent high quality interpretation. These experts are referred to as “Subspecialists”.

The following are the Subspecialty categories

- **Neuroradiology:**
Brain, Head & Neck, and Spine
- **Musculoskeletal Radiology (MSK):**
Muscles, Bones, Joints and Associated Structures
- **Musculoskeletal Radiology (MSK) including Spine:**
Muscles, Bones, Joints, Associate Structures and Spine
- **Body Imaging:**
Chest, Abdomen, Pelvis, and Vascular

Phase I: Subspecialist Participation Standards, Preferred Experience and Maintenance of Expertise

Different subspecialties require different levels of training and experience. All subspecialty radiologist applicants must meet the basic participation standards as well as subspecialty-specific, initial and continuing participation standards.

Subspecialist Participation Standards

Basic Participation Standards:

- Completion of all relevant physician credentialing forms
- Possess Doctor of Medicine (MD) degree or Doctor of Osteopathy (DO) degree
- Each physician undergoes primary-source verification
- Board certification in Radiology or Diagnostic Radiology by the American Board of Radiology (ABR), by the American Osteopathic Board of Radiology (AOBR), or by the Royal College of Physicians and Surgeons of Canada (RCPSC)
- Each physician must possess a current license that is in good standing, to practice medicine in the state where services are to be rendered
- Must provide proof of current professional liability insurance coverage
- Foreign medical school graduates must submit an Educational Commission for Foreign Medical Graduates (ECFMG) Certificate
- Provide disclosure of malpractice history for the preceding 5 years
- Possess an acceptable Malpractice History
- Provide disclosure of any disciplinary issues or reportable actions to the NPDB or state medical board, or any sanction against the applicant's ability to possess a current Drug Enforcement Administration (DEA) Certificate or State level Controlled Dangerous Substance (CDS) Certificate
- Applicants must demonstrate having acquired a minimum of 30 CME credits, in their area of subspecialty, in the most recent 3-year period
- The following were used as guidelines in the creation of the Premerus Radiologist Standards:
 - American College of Radiology (ACR) Standards
 - Accreditation Council for Graduate Medical Education (ACGME)
 - Mammography Quality Standards Act (MQSA) final rule as published by the Food and Drug Administration (FDA).
 - *White Papers*, Published by the Credentialing Resource Center
 - American Academy of Neurology

Initial Participation Standards:

- For all subspecialties fellowship training is required. Exception: Consideration for Certified Premerus Expert applicants will be given to non-fellowship prepared physicians who have a demonstrated and widely recognized expertise in their field of specialty, as signaled by academic achievements, publications in the area of specialty reading, etc. Note: if applicant is a recent fellowship graduate, the applicant must still meet all other requirements including CME's within the first 3 years following completion of fellowship
- Relevant fellowship training required for each subspecialty if applicant is applying for two subspecialties
- CAQs will be required for all sub-specialties that offer them. Currently CAQs are required in Neuroradiology, Pediatrics, Nuclear Medicine, and Interventional Radiology (angiography). For the purposes of the Premerus program, a CAQ is required for Neuroradiology.
- Body, Musculoskeletal and Neuroradiology applicants should have interpreted >10,000 studies in their subspecialty field. Applicant must provide documented evidence of procedure volume and experience, as well assign an attestation statement.
- Meeting ACR, ACC Guidelines for interpretation in Subspecialty areas if available.

- All subspecialists are expected to concentrate on their subspecialty as evidenced by compliance with required subspecialty interpretation volumes; exhibiting a focus of approximately 50% of their advanced imaging (excluding plain film, fluoroscopy, etc) professional practice on their subspecialty (on-going)
- On-going Maintenance of Experience (outlined in “Continuing Participation Standards” below)
- Maintenance of CME: Minimum of 60 Category I (AMA, PRA or ACR) hours (30 within the applicants area of subspecialty) **every three years OR** minimum required by the medical licensing board in the State where services are rendered; whichever is greater. Note: *Category I may include the AMA Physician Recognition Award (PRA), ACR Category I ACR MRP, or a combination of these.*
- Successfully passing the testing program (outlined under section “Report Testing”)

Continuing Participation Standards by Subspecialty:

Neuroradiology:

- Maintenance of Experience MRI: Interpret and report a minimum of 2,400 neuroradiology MRI examinations per year. For physicians assuming limited MR imaging for specific anatomic areas, the examinations should reflect those anatomic areas
- Maintenance of Experience CT: Interpret and report a minimum of 100 neuroradiology CT examinations per year. For physicians assuming limited CT imaging for specific anatomic areas, the examinations should reflect those anatomic areas
- Maintenance of Certification (MOC): as required by the American Board of Radiology (Please reference <http://theabr.org> and Appendix I
- Maintenance of Acceptable National Practitioner Data Bank Review
- Maintenance of Acceptable Quality Assurance Review (Appendix II)

Musculoskeletal Radiology:

- Maintenance of Experience MRI: Interpret and report a minimum of 2,400 MSK MRI examinations per year. For physicians assuming limited MR imaging for specific anatomic areas, the examinations should reflect those anatomic areas.
- Maintenance of Experience CT: Interpret and report a minimum of 100 MSK CT examinations per year. For physicians assuming limited CT imaging for specific anatomic areas, the examinations should reflect those anatomic areas.
- Maintenance of Acceptable National Practitioner Data Bank Review
- Maintenance of Acceptable Quality Assurance Review (Appendix II)

Body Imaging:

- Maintenance of Experience CT: Interpret and report a minimum of 2,400 body CT examinations per year. For physicians assuming limited CT imaging for specific anatomic areas, the examinations should reflect those anatomic areas.

- Maintenance of Experience MRI: Interpret and report a minimum of 100 body MRI examinations per year. For physicians assuming limited MR imaging for specific anatomic areas, the examinations should reflect those anatomic areas.
- Maintenance of Acceptable National Practitioner Data Bank Review
- Maintenance of Acceptable Quality Assurance Review: (Appendix II)

Preferred Experience (not mandatory):

- Publications (Peer Review, in area of expertise)
- Academic Appointments (current)
- Academic Appointments (past)
- Lecturing (invited, in area of expertise)

Phase II: Interview:

Interviews are focused on the candidate's dedication to practice as a subspecialist, their commitment to quality, and their willingness to work as a member of the Premerus network. Premerus will conduct personal or phone interviews on an as-needed basis as determined by the Premerus Qualifications Committee, Medical Director or Chief Medical Officer.

Phase III: Report testing

The final product of a radiologist is the report. The report is an important factor used to determine patient treatment. As a result, this significantly impacts patient morbidity and mortality as well as treatment costs.

The training, credentials, publications, lecturing experience, academic appointments, recommendations, and personality of the applicant are not enough to predict the quality of their report.

Existing criteria in radiology are not enough to improve interpretation quality. Certification Boards measure only the knowledge of the radiologists. ACR accreditation measures the quality of the imaging modality and facility. Premerus tests the report quality, which is the primary factor affecting patient management, patient outcomes and costs. Premerus specifically tests the quality of an applicant's reports with a specific process: Quality Report Assessment ("QRA").

Testing Process:

The applicant is required to interpret various cases within their subspecialty. These cases should be dictated and transcribed in the same fashion as the candidate currently practices.

Neuroradiology:

Number of Cases: 10

Musculoskeletal Radiology (MSK):

Number of Cases: 10

Musculoskeletal Radiology (MSK with Spine):

Number of Cases: 15

Body Imaging

Number of Cases: 10

QRA summary:

Premerus evaluates an applicant's report to assess the ability to integrate any provided clinical and laboratory information, observe significant findings, and utilize their knowledge, experience and judgment to provide a report that is descriptive, definitive, has the appropriate differential diagnosis and is appropriately directive in the management of the patient. It is also important that the report follows the accepted format as proposed by the ACR Appropriateness Criteria. A complete assessment focuses on the following elements:

Observational assessment (OA)

- Ability to identify all pathology of the body part being examined
- Ability to differentiate unrelated pathologic processes
- Ability to differentiate significant from insignificant findings
- Ability to recognize significant pathology outside the body part being examined
- Ability to compare a current and prior study to evaluate interval stability or change
- Ability to correlate findings from other imaging modalities

Cognitive assessment (CogA)

- Ability to integrate clinical, laboratory, and pathology information, as well as any previous treatment with current observational findings

Consultative assessment (CA)

- Ability to specifically answer clinical question being sought by the examination
- Ability to provide a reasonable and concise differential diagnosis
- Ability to appropriately advise management of the patient