Radiology

Background

According to the Accreditation Council for Graduate Medical Education (ACGME), diagnostic radiology encompasses a variety of diagnostic and image-guided therapeutic techniques. The specialty includes all aspects of radiological diagnosis, nuclear radiology, diagnostic ultrasound, magnetic resonance, computed tomography (CT), interventional procedures, and the use of other forms of radiant energy.

The radiologist who is qualified to perform these procedures has completed five years of clinically oriented graduate medical education. The first year must consist of accredited training in internal medicine, pediatrics, surgery or surgical specialties, obstetrics and gynecology (OB/GYN), neurology, family practice, emergency medicine, or any combination of these. Following this training, the radiologist completes four years in diagnostic radiology.

In the diagnostic radiology program, the ACGME states that physicians must be provided with a sufficient volume and variety of patients to ensure that they gain experience in the full range of radiologic examinations, procedures, and interpretations. A reasonable volume is no less than 7,000 radiologic examinations per year per resident. The number of examinations in each of the subspecialty areas must be of sufficient volume to ensure adequate training experience. If volume in any subspecialty area is less than acceptable, a plan must be developed to increase trainee exposure.

There are physicians, such as vascular surgeons, cardiologists, orthopedic surgeons, OB/GYN physicians, critical care and emergency medicine physicians, and family practice physicians, who perform radiologic procedures. These physicians must be able to demonstrate training and experience in their residency programs or have had other training and experience that is verifiable in each radiologic procedure for which they are seeking privileges.
Involved specialties
Radiologists and other physicians who perform radiologic procedures

Positions of societies and academies
The American College of Radiology (ACR) publishes a policy statement regarding medical staff privileges. In the statement, the ACR states that radiologists with hospital medical staff appointments and clinical privileges should have the same rights as any other member of the hospital's medical staff. Clinical privileges comprise the right of medical staff members to provide specific patient care services in a manner consistent with licensure, education, and expertise.

These rights include not only the right to provide the delineated services to patients but also the right of access to hospital resources, including equipment, facilities, and personnel necessary to exercise those privileges effectively. Any physician who has gone through the credentialing process and obtained medical staff privileges is entitled to full procedural due process before those privileges are curtailed, as provided by the fair hearing plan in the medical staff bylaws.

Hospital governing boards should abridge a physician's privileges only upon recommendation of the medical staff for reasons related to professional competence, adherence to appropriate standards of medical care, health status, or other parameters agreed on by the medical staff.

The ACR also publishes *ACR Standard for General Radiography*. In the standard, the ACR states that physicians should have certification in radiology or diagnostic radiology by the American Board of Radiology (ABR), the American Osteopathic Board of Radiology (AOBR), the Royal College of Physicians and Surgeons of Canada (RCPSC), or Le College des Medecins du Quebec. Or they should have documentation of a minimum of six months' formal dedicated training in the interpretation and formal reporting of general radiographs, including patients of all ages, in an ACGME-approved residency program that included radiographic training on all body areas.

In addition, physicians should have the following qualifications:

- Documented training and understanding of the physics of diagnostic radiography and experience with the equipment needed to safely produce the images. This should include
general radiography, film-screen combinations, conventional image processing, and, where applicable, digital image processing

- Familiarity with the principles of radiation protection, the hazards of radiation exposure to both patients and radiologic personnel, and radiation monitoring requirement

- Documented training and understanding of other medical imaging modalities (fluoroscopy, CT, ultrasound, magnetic resonance imaging, nuclear medicine, etc.) and their value relative to general radiography in order to best evaluate the patient's clinical symptoms

Positions of other interested parties

The ABR grants certification in diagnostic radiology. The ABR requires that candidates for certification have five years of approved training. The five years must meet the following criteria:

- A minimum of four years in diagnostic radiology, which must be spent in a department approved for training in diagnostic radiology by the Residency Review Committee for diagnostic radiology of the ACGME, or by the RCPSC. A minimum of six months, but no more than 12 months, must be spent in nuclear radiology.

- The other year must be accredited clinical training in internal medicine, pediatrics, surgery or surgical specialties, OB/GYN, neurology, family practice, emergency medicine, or any combination of these. This clinical year should be the first postgraduate year. No more than a total of three months may be spent in radiology, radiation oncology, and/or pathology. All clinical training must be in an ACGME, American Osteopathic Association (AOA), RCPSC, or equivalent approved program.

- Residents must have Basic Cardiac Life Support certification. Advanced Cardiac Life Support certification is encouraged.

The AOA grants certification in radiology through the AOBR. To be eligible to receive certification, applicants must meet the following minimum requirements:

- Graduation from an AOA-accredited college of osteopathic medicine
- Licensed to practice in the state or territory where his or her
practice is conducted
- Membership in good standing of the AOA or the Canadian Osteopathic Association for the two years immediately prior to the date of certification
- Satisfactory completion an AOA-approved internship
- For applicants beginning their residency training on July 1, 1989, and thereafter, completion of four or more years of AOA-approved training in diagnostic radiology after the required one year of internship
- For applicants beginning their residency training prior to July 1, 1989, completion of three or more years of AOA-approved training in radiology or diagnostic radiology

**JCAHO**
The Joint Commission on Accreditation of Healthcare Organizations (JCAHO) has no formal position on the delineation of privileges in radiology. However, its 2003 *Comprehensive Accreditation Manual for Hospitals* states (MS.5.4) that “professional criteria specified in medical staff bylaws must be uniformly applied to all applicants,” and that these criteria “constitute the basis for granting initial or continuing medical staff membership and for granting initial, renewed, or revised clinical privileges.”

The JCAHO further requires (MS.5.4.3) that “the professional criteria at least pertain to evidence of current licensure, relevant training or experience, current competence, and ability to perform the privileges requested.” It also requires (MS.5.4.3.1) that “the hospital verifies information about the applicant’s licensure, specific training, experience, and current competence provided by the applicant with information from the primary source(s) whenever feasible.”

Although the JCAHO does not require hospitals to use any specific method in delineating clinical privileges, it does require (MS.5.15) that “the clinical privileges are hospital specific and based on the individual’s demonstrated current competence.” It further states (MS.5.15.1–MS.5.15.1.3) that “privileges are related to an individual’s documented experience in categories of treatment areas or procedures; the results of treatment; and the conclusions drawn from organization performance-improvement activities when available.”

The JCAHO also says (MS.5.15.2) “board certification is an excellent benchmark and is considered when delineating clinical privileges.”
Since a hospital must subject each member of its medical staff to periodic review, the JCAHO states (MS.5.4.4) that “decisions on reappointments or on revocation, revision, or renewal of clinical privileges must consider criteria that are directly related to quality of care,” and (MS.5.6) “appointment or reappointment to the medical staff and the initial granting and renewal or revision of clinical privileges are also based on information regarding the applicant’s competence.”

It is further stated (MS.5.12–MS.5.12.3) that “appraisal for reappointment to the medical staff or renewal or revision of clinical privileges is based on ongoing monitoring of information concerning the individual’s professional performance, judgment, and clinical or technical skills.”

**CRC draft criteria**

The following draft criteria are intended to serve solely as a starting point for the development of an institution’s policy regarding this practice area.

**Minimum threshold criteria for requesting core privileges in radiology**

- **Basic education:** MD or DO
- **Minimum formal training:** Applicants must have completed an ACGME/AOA-accredited residency-training program in radiology or diagnostic radiology. Applicants must also have Basic Cardiac Life Support certification. Advanced Cardiac Life Support certification is encouraged.
- **Required previous experience:** Applicants must be able to demonstrate that they have performed and/or interpreted at least 1,000 radiologic tests in the past 12 months.

**Note:** A letter of reference should come from the director of the applicant’s radiology training program. Alternatively, a letter of reference regarding competence should come from the chief of radiology at the institution where the applicant most recently practiced.

**Core privileges in radiology**

Core privileges in radiology include but are not limited to the supervision and performance of the following procedures:

- Plain film interpretation
- Fluoroscopy
- Intravenous pyelogram
- Ultrasound
- Vascular ultrasound
- Myelography
- CT
- Diagnostic nuclear medicine
Radiology

• Venography
• Arthrography
• Imaging guided biopsy and drainage procedures
• General angiographic catheter procedures, exclusive of cerebral angiography

Special requests for radiology

For each special request, threshold criteria must be established. Special requests for radiology include those procedures that are included in the following subspecialty fellowship programs and were not included in the applicant’s residency training program:

• Nuclear radiology
• Vascular and interventional radiology
• Neuroradiology
• Pediatric radiology

Note: Radiation oncology is considered as a specialty of radiology and has its own practice requirements. See the Clinical Privilege White Paper Radiation Oncology—Practice area 121.

Reappointment

Reappointment should be based on unbiased, objective results of care according to the organization’s existing quality assurance mechanisms.

Applicants must be able to demonstrate that they have maintained competence by showing evidence that they have performed and/or interpreted at least 1,000 radiologic tests annually over the reappointment cycle.

In addition, continuing education related to radiology should be required.

For more information

For more information regarding this practice area, contact:

Accreditation Council for Graduate Medical Education
515 North State Street, Suite 2000
Chicago, IL 60610-4322
Telephone: 312/464-4920
Fax: 312/464-4098   Web site: www.acgme.org
American Board of Radiology  
5441 East Williams Boulevard, Suite 200  
Tucson, AZ 85711  
Telephone: 520/790-2900  
Fax: 520/790-3200  Web site: www.theabr.org

American College of Radiology  
1891 Preston White Drive  
Reston, VA 20191  
Telephone: 703/648-8900  
Fax: 703/648-9176  Web site: www.acr.org

American Osteopathic Board of Radiology  
119 East Second Street  
Milan, MO 63556  
Telephone: 660/265-4011  
Fax: 660/265-3494  Web site: www.aocr.org

Joint Commission on Accreditation of Healthcare Organizations  
One Renaissance Boulevard  
Oakbrook Terrace, IL 60181  
Telephone: 630/792-5000  
Fax: 630/792-5005  Web site: www.jcaho.org
Privilege request form  
Radiology

In order to be eligible to request clinical privileges in radiology, an applicant must meet the following minimum threshold criteria:

- **Basic education:** MD or DO.

- **Minimum formal training:** Applicants must have completed an ACGME/AOA-accredited residency-training program in radiology or diagnostic radiology.

- **Required previous experience:** Applicants must be able to demonstrate that they have performed and/or interpreted at least 1,000 radiologic tests in the past 12 months. Applicants must also have Basic Cardiac Life Support certification. Advanced Cardiac Life Support certification is encouraged.

- **References:** A letter of reference should come from the director of the applicant’s radiology training program. Alternatively, a letter of reference regarding competence should come from the chief of radiology at the institution where the applicant most recently practiced.

- **Core privileges:** Core privileges in radiology include but are not limited to the supervision and performance of the following procedures:
  - Plain film interpretation
  - Fluoroscopy
  - Intravenous pyelogram
  - Ultrasound
  - Vascular ultrasound
  - Myelography
  - CT
  - Diagnostic nuclear medicine
  - Venography
  - Arthrography
  - Imaging guided biopsy and drainage procedures
  - General angiographic catheter procedures, exclusive of cerebral angiography

- **Reappointment:** Reappointment should be based on unbiased, objective results of care according to the organization’s existing quality assurance mechanisms.

  Applicants must be able to demonstrate that they have maintained competence by showing evidence that they have performed and/or interpreted at least 1,000 radiologic tests annually over the reappointment cycle.

  In addition, continuing education related to radiology should be required.

I understand that by making this request I am bound by the applicable bylaws or policies of the hospital, and hereby stipulate that I meet the minimum threshold criteria for this request.

Physician’s signature: ________________________________________________________________

Typed or printed name:________________________________________________________________

Date: ________________________________________________________________________________