

Glossary for Radiology Residents

Accreditation

A self-regulatory process by which governmental, non-governmental, voluntary associations or other statutory bodies grant formal recognition to educational programs or institutions that meet stated criteria of educational quality. Educational programs or institutions are measured against certain standards by a review of written information, self-studies, site visits to the educational program, and thoughtful consideration of the findings by a review committee. Whereas programs or institutions are *accredited*, individual physicians are licensed or certified.

Accreditation Council for Graduate Medical Education (ACGME)

An association formed by five member organizations- American Board of Medical Specialties, American Hospital Association, American Medical Association, Association of American Medical Colleges, and Council of Medical Specialty Societies. This council develops requirements for and oversees the accreditation of residency programs.

American Board of Radiology (ABR)

The American Board of Radiology certifies medical doctors to practice radiology in North America. Certificates are issued to candidates who have demonstrated their knowledge and proficiency by successfully completing comprehensive written and oral examinations.

Five primary certificates are offered in three fields of radiology: Diagnostic Radiology, Radiation Oncology, and 3 separate certificates covering Radiologic Physics and its subfields. Four subspecialty certificates (CAQs) are offered: Neuroradiology, Nuclear Radiology, Pediatric Radiology, and Vascular and Interventional Radiology.

American College of Radiology (ACR)

With more than 30,000 members, the ACR is the principal organization of radiologists, radiation oncologists, and clinical medical physicists in the US. The College is a nonprofit professional society whose primary purposes are to advance the science of radiology, improve radiologic services to the patient, study the socioeconomic aspects of the practice of radiology, and encourage continuing education for radiologists, radiation oncologists, medical physicists, and persons practicing in allied professional fields.

Arkansas State Medical Board

The Medical Board serves as the State licensing and regulatory agent for these occupations in the State of Arkansas. The Medical Board's mission is to protect the public and act as their advocate by effectively regulating the practices of Medical Doctors, Osteopathic Medical Doctors, Physician Assistants, Medical Corporations, Respiratory Therapists, Occupational Therapists and Occupational Therapy Assistants.

Assessment

A system of evaluation of professional accomplishments using defined criteria and usually including an attempt at measurement either by grading on a rough scale or by assigning numerical value. The purpose of assessment in an educational context is to make a judgment about the level of skills or knowledge, to measure improvement over time, to evaluate strengths and weaknesses, to

rank students for selection or exclusion, or to motivate. Assessment should be as objective and reproducible as possible. A reliable test should produce the same or similar scores on two or more occasions or if given by two or more assessors. The validity of a test is determined by the extent to which it measures whatever it sets out to measure. One can distinguish three types of assessment:

Formative assessment is testing that is part of the developmental or ongoing teaching/learning process. It should include delivery of feedback to the student.

Summative assessment is testing which often occurs at the end of a term or course, used primarily to provide information about how much the student has learned and how well the course was taught.

**Associate Dean for
Graduate Medical
Education
Case or Procedure Log**

The Dean's designee who is responsible for administering the institutional responsibilities of graduate medical education.

Documentation of the number number of cases or procedures performed for compairson against minimum numbers required.

**Certificate of Added
Qualifications (CAQ)**

Subspecialty certificates (CAQs) are offered by the ABR in Neuroradiology, Nuclear Radiology, Pediatric Radiology, and Vascular and Interventional Radiology. Candidates must successfully complete one year of fellowship training (after residency) in a program approved and accredited by the ACGME or RCPSC and one year of practice or additional training in the subspecialty.

Certification

The process for determining whether an individual physician has met established requirements within a particular specialty. The standards for certification are determined by the appropriate member specialty board recognized by the American Board of Medical Specialties (ABMS).

Competence

Possession of a satisfactory level of relevant knowledge and acquisition of a range of relevant skills that include interpersonal and technical components at a certain point in the educational process. Such knowledge and skills are necessary to perform the tasks that reflect the scope of professional practices. Competence may differ from "performance", which denotes actions taken in a real life situation. Competence is therefore not the same as "knowing" on the contrary, it may well be about recognizing one's own limits. The more experienced the professional being tested, the more difficult it is to create a tool to assess their actual understandings and the complex skills of the tasks they undertake. A holistic integration of understandings, abilities and professional judgments i.e. a "generic" model, is one where competence is not necessarily directly observable, but rather can be inferred from performance.

Curriculum

An educational plan that spells out which goals and objectives should be achieved, which topics should be covered and which methods are to be used for learning, teaching and evaluation.

Dean	The chief administrative and academic officer of the College of Medicine who recruits and appoints all departmental chairs, associate and assistant deans and all committees.
Designated Institutional Official	The person who has the authority and responsibility for the oversight and administration of the Sponsoring Institution's ACGME-accredited programs and who is responsible for assuring compliance with ACGME Institutional Requirements. The Associate Dean for GME serves this role in the College of Medicine.
Director of House staff Records	The Dean's designee who is responsible for financial and administrative issues for residents in training programs of the College of Medicine. The House staff Office, located in the Dean's Office, houses the Director and administrative staff. This group works with each program coordinator and is responsible for certain records, including verification of visas and certificates, and maintains the records for stipends and benefits.
Duty hours	All clinical and academic activities related to the residency program; i.e., patient care (both inpatient and outpatient), administrative duties relative to patient care, the provision for transfer of patient care, time spent in-house during call activities, and scheduled activities such as conferences. Duty hours do not include reading and preparation time spent away from the duty site.
Educational or Instructional Objectives	Statements that describe what learners should be able to master. A major aim is the acquisition of facts, concepts and principles. Developing instructional objectives involves learning the fundamentals and vocabulary of each discipline and developing a logical progression of concepts in each discipline. Resources and materials are more effectively deployed when instructional objectives are explicit. It is important to assure that objectives are measurable and that they delineate a specific level of competence. One can and should distinguish between <i>knowledge, skill and attitude</i> objectives.
Ethics	The branch of philosophy that deals with distinctions between right and wrong and with the moral consequences of human actions. Examples of ethical issues that arise in medical practice and research include informed consent, confidentiality, respect for human rights, and scientific integrity.
Evaluation	<p>A process that attempts to systematically and objectively determine the relevance, effectiveness, and impact of activities in light of their objectives. Evaluation can be related to structure, process, or outcome and can be used to provides information about individual or programs performance.</p> <p>Formative (feedback) evaluations generally require the least amount of rigor, whereas summative individual and summative program evaluation for external use (e.g., certification of competence) requires the greatest amount of rigor. When a high degree of methodological rigor is required, the measurement instrument must be appropriate in</p>

terms of content, reliability, validity, and practicality.

Fellow

A term used by some sponsoring institutions and in some specialties to designate participants in subspecialty GME programs. The GME director and the ACGME use "residents" to designate all GME participants in ACGME-accredited programs.

Graduate Medical Education (GME)

The second phase following undergraduate medical education or the medical school phase, which prepares physicians for practice in a medical specialty. GME focuses on the development of clinical skills and professional competencies and on the acquisition of detailed, factual knowledge in a medical specialty. This learning process prepares the physician for the independent practice of medicine in that specialty.

Graduate Medical Education Committee

A standing committee of the College of Medicine which supervises, coordinates, reviews and assures the quality education of residency programs.

Health Care

Services provided to individuals or communities by a health care system or by professionals to promote, maintain, monitor, or restore health. Health care contains a broad spectrum of services and activities delivered by a team of health personnel. This contrasts with medical care, which concentrates on diagnostic and therapeutic actions performed by or under the supervision of an individual physician.

**HIPPA
Institutional Core Curriculum**

A set or course of learning activities (e.g. lectures, computer modules) arranged to impart knowledge and skills in fundamental domains (e.g. communication skills, legal issues, ethics). The curriculum is designed and implemented at the institutional level.

Intern

Historically, "intern" was used to designate individuals in the first year of GME; less commonly it designated individuals in the first year of any residency program. Since 1975 the GME directory and the ACGME have not used this term, instead referring to individuals in their first year of GME as residents.

Internal Review

The formal process undertaken by a sponsoring institution or its individual ACGME-accredited programs in conformity with the institutional requirements to evaluate the sponsored programs.

In-training Exam

A multiple-choice exam developed by an external vendor. In radiology, this exam is developed and administered by the American Board of Radiology.

Licensure

The governmental process through which an individual physician is given permission to practice medicine within a particular licensing jurisdiction. Medical licenses are granted by the Board of Medical Examiners (or the equivalent) in each licensing jurisdiction (the 50 states). Individuals in training programs in the State of Arkansas are not required to have a license while rendering services within the

training program. This is distinct from both accreditation and certification.

Maintenance of Certification (MOC)

As the applications, technologies, and methodologies of radiology continue to expand and develop, the ABR understands that lifelong learning is critical to ensure new information and knowledge are incorporated into clinical practice. The Maintenance of Certification process (ABR-MOC) is designed to be a comprehensive vehicle through which all diplomates can ensure the public and the radiologic community that they are incorporating new information into their practices, thereby delivering excellence in care. Diplomates with time-limited certificates are automatically enrolled in the process. Those with lifetime certificates should consider ABR-MOC as an investment that will ensure continuing education, instill confidence, and promote the best interests of the patient.

Participating Institution

An institution to which residents rotate for a required experience and/or those that require explicit approval by the appropriate RRC prior to utilization. At UAMS the participating institutions are UAMS Medical Center, Arkansas Children's Hospital, VA Medical Center, St. Vincent's Infirmary Medical Center and Baptist Medical Center.

Patient-centered care

A philosophy of care that encourages (a) shared control of the consultation, decisions about interventions or management of the health problems with the patient and/or (b) a focus in the consultation on the patient as a whole person who has individual preferences situated within social contexts (in contrast to a focus in the consultation on a body part or disease).

Peer Review or Peer Evaluation

Method for evaluating professional attitudes and behavior, used by trainees to assess each other and also used by supervisors, nurses and patients to assess trainees. Typical measurement tools for this form of testing are checklists and questionnaires.

Picture Archive and Communication Systems (PACS)

PACS systems make it possible to electronically store, manage, distribute and view digital (filmless) images.

Professionalism

Adherence to a set of values comprising both a formally agreed-upon code of conduct and the informal expectations of colleagues, clients and society. The key values include acting in a patient's interest, responsiveness to the health needs of society, maintaining the highest standards of excellence in the practice of medicine and in the generation and dissemination of knowledge. In addition to medical knowledge and skills, medical professionals should present psychosocial and humanistic qualities such as caring, empathy, humility and compassion, as well as social responsibility and sensitivity to people's culture and beliefs. All these qualities are expected of members of highly trained professions.

Program

The unit of specialty education, comprising a series of graduated learning experiences in GME, designed to conform to the program requirements of a particular specialty.

Program Coordinator	The administrative assistant who assists the Program Director in maintaining and completing the written documentation of the program.
Program Director	The faculty member who is directly responsible for all of the educational and administrative aspects of a specific residency or fellowship program.
Quality Assurance	A system of procedures, checks, audits, and corrective actions to ensure that all research, testing, monitoring, sampling, analysis, and other technical and reporting activities are of the highest achievable quality. Quality assurance serves to benefit the <i>quality of care</i> .
Radiologist Assistant	An advanced-level radiologic technologist who works under the supervision of a radiologist to enhance patient care by assisting the radiologist in the diagnostic imaging environment.
Radiology	<p>The branch of medicine which encompasses the diagnostic and therapeutic applications of radiant energy and radiation safety as included in each of these subfields as specified below.</p> <p><u>Diagnostic Radiology</u> encompasses a variety of diagnostic and image-guided therapeutic techniques, including all aspects of radiological diagnosis, nuclear radiology, diagnostic ultrasound, magnetic resonance, computed tomography, interventional procedures and the use of other forms of radiant energy.</p> <p><u>Radiation Oncology</u> is that branch of clinical medicine concerned with the causes, prevention, and treatment of cancer and certain nonneoplastic conditions utilizing ionizing radiation.</p> <p><u>Radiologic Physics</u> is that branch of medical physics which includes Therapeutic Radiological Physics, Diagnostic Radiological Physics, and Medical Nuclear Physics.</p>
Radiology Information Systems (RIS)	RIS provide electronic management of medical information: they streamline scheduling and ordering of appointments, patient registration, worklists, billing, medical and management reporting.
Research	Scientific inquiry or an organized quest for new knowledge and better understanding, such as of the natural world or determinants of health and disease. Research can take several forms: empiric (observational), analytic, experimental, theoretical and applied.
Residency Training Program	A specialty program that is based in a hospital or other health care institution and, in most specialties, utilizes both inpatient and ambulatory settings. GME programs, including transitional year programs, are called residency programs and the physicians being educated in them are called residents.
Resident	For the purposes of the policies of the Graduate Medical Education Committee of the UAMS College of Medicine, the term resident refers to any one in a GME program sponsored by the University of Arkansas

College of Medicine, at levels PGY-1 and above. This includes all other terms such as intern, fellow or house staff member or house officer.

Resident

A physician at any level of GME in any of the training programs sponsored by the UAMS College of Medicine. Participants in accredited subspecialty programs are specifically included.

Review of Patient Chart/Record

Involves abstraction of information from patient records, such as tests ordered, and comparison of findings against accepted patient care standards.

Scholar

Scholars are considered to be those academics who conduct research, publish, and then perhaps convey their knowledge to students or apply what they have learned. What is urgently needed today is a more inclusive view of what it means to be a scholar - a recognition that knowledge is acquired through research (discovery), through synthesis (integration), through practice (application) and through teaching (E. L. Boyer, 1990).

Sponsoring Institution

The institution that assumes the ultimate responsibility for a program of GME. The sponsoring institution of all programs at UAMS is the College of Medicine.

Standard

A model, example or rule for the measure of quantity, weight, extent, value, or quality, established by authority, custom or general consent. It is also defined as a criterion, gauge or yardstick by which judgments or decisions may be made. A meaningful standard should offer a realistic prospect of determining whether or not one actually meets it.

Standards may be *mandatory* (required by law), *voluntary* (established by private and professional organizations and available for use), or *de facto* (generally accepted by custom or convention, such as standards of dress, manners, or behavior).

Teaching, Clinical

Teaching that occurs in medical settings and addresses issues related to residents' current patient cases or clinical responsibilities.

Teaching, Clinical Experiences

Direct, hands-on clinical or patient care activities. This may include surgery, patient exams, the reading of radiographs and preparation of pathology assays.

Teaching, Computer Modules

Computer-based instructional units that present medical knowledge or clinical tasks, etc, that residents work through independently. These modules are developed either by the institution/program or purchased from commercial vendors.

Teaching, Departmental Conferences, Lectures or Discussions

Formal, classroom instruction on a specific topic or method, led by one or more faculty, residents, or staff, etc.

Teaching, Individual or Group Projects

Multi-step, multi-component tasks performed as vehicles for learning and applying knowledge and skills. Projects should result in a product. Examples are literature reviews, research, clinical quality

improvement projects, and community health advocacy work.

**Teaching, Performance
Feedback**

Information provided to a resident that describes what (s)he has done well or poorly and provides specific guidance as to how performance might be improved.

Teleradiology

Electronic transmission of radiological images from one location to another for the purpose of interpretation and consultation .