ACR Resources for ACGME Core and Milestones

The ACGME Core Competencies are a set of skills and behaviors that physicians are expected to develop, and the Milestones are a framework for measuring their progress. The Milestones are organized into six Core Competencies and are used to evaluate residents and fellows throughout their training. The Core Competencies are:

Patient Care, Medical Knowledge, Professionalism, Interpersonal and Communication Skills, Practice-based Learning and Improvement, and Systems-based Practice.

The ACR has many resources that may help residency programs satisfy these requirements.

Contents

What are the ACGME Competencies, Sub-competencies and Milestones?

Competency is the knowledge, skills, abilities, and behaviors that contribute to individual and organizational performance. The ACGME Core Competencies, along with their sub-competencies and milestones, form the backbone of a competency-based medical education (CBME) model that is increasingly replacing traditional time-based training in graduate medical education. Here's a breakdown of the framework:

- ACGME Core Competencies

The ACGME (Accreditation Council for Graduate Medical Education) defines six Core Competencies that every resident must master:

1. Patient Care and Procedural Skills
2. Medical Knowledge
3. Practice-Based Learning and Improvement
4. Interpersonal and Communication Skills
5. Professionalism
6. Systems-Based Practice

- Sub-competencies and Milestones

Each core competency is broken down into sub-competencies, which are more specific skill areas. These are further mapped to milestones, which describe observable behaviors and performance levels across a developmental continuum.

Milestones are used to:

- Track resident progress semi-annually.
- Guide feedback and coaching.
- Inform decisions about readiness for unsupervised practice.

In ACGME-accredited residency and fellowship programs, **the program director, in conjunction with the Clinical Competency Committee (CCC), determines if a resident has fulfilled the ACGME competencies**.

For more information:
Accreditation Council for Graduate Medical Education
The Milestones Guidebook
The Milestones Guidebook for Residents and Fellows

Patient Care 1: Reporting

Patient Care 1: Reporting				
Level 1	Level 2	Level 3	Level 4	Level 5
Generates reports with appropriate elements for coding Describes lexicons and structured reporting	Efficiently generates clear and concise reports which do not require substantive correction Uses lexicons and structured reporting that do not require substantive correction	Efficiently generates clear and concise reports which rarely require correction Uses lexicons and structured reporting which rarely require correction	Generates tailored reports meeting the needs of the care provider Proficiently uses lexicons and structured reporting to provide accurate and timely reports which do not require correction	Generates tailored reports meeting subspecialty needs

Reporting and Data Systems (RADS) - ACR Reporting and Data Systems (RADS) serve as a standardized framework for characterizing and reporting imaging findings. The primary objective of ACR RADS is twofold: to facilitate effective communication between radiologists and referring physicians and enhance consistency in terminology across reports. The following resources and education modules are available to educate residents on radiology reporting:

Available Document Resources:

- BI-RADS Atlas Fifth Edition
- LI-RADS v2018 Manual
- O-RADS MRI Assessment Categories Table v2024
- O-RADS US Assessment Categories Table v2022
- Bone-RADS v2023 Assessment Categories
- C-RADS v2023 Assessment Categories
- Lung-RADS V2022
- NI-RADS PET/CT Category Descriptors
- PI-RADS v2.1 2019
- ACR TI-RADS

JACR Literature:

- A Hands-Free Approach With Voice to Text and Generative Artificial Intelligence: Streamlining Radiology Reporting

Available education:

Education Name	Format	Objectives	Cost	Level
LI-RADS Case-Based Education	eLearning	• Assess, describe, and categorize liver observations on CT/MRI using LI-RADS (updated version, 2018). • Apply consistent and reproducible terminology to enhance communication with referring providers. • Reduce interpretive errors of liver observations in at-risk populations for liver cancer.	Free	1-3

Incorporating O-RADS US v2022 in Daily Clinical Practice	eLearning	• Describe the new O-RADSTM US v2022 update. • Recognize how to incorporate the new O-RADSTM US v2022 update into practice. • Review new lexicon descriptors, management options and assessment tools provided in the O-RADSTM update.	Free	1-3
O-RADS™ MRI: A Guide to the Lexicon, Risk Score and Technique	eLearning	• Describe how to accurately characterize both fluid and solid components on MRI using T1-weighted with and without contrast, T2-weighted and diffusion-weighted imaging sequences. • Identify technical requirements and the risk score categories in the O-RADS MRI risk stratification system. • Develop an algorithmic approach to analyzing adnexal lesions on MRI based on their imaging appearance.	Free	1-3
Primer for using PI-RADS v2.1 for Prostate MRI Activity	eLearning	• Outline the principles of PI-RADS v2.1 and the scoring system during the interpretation of mpMRI of the prostate. • Describe caveats for the interpretation of prostate cancer mimickers. • Demonstrate how to report imaging findings using the standardized format. • Cite ways to optimize prostate imaging protocols using the mpMRI principles to achieve the best diagnostic performance.	Free	1-3
Lung Cancer Screening	eLearning	• Describe acquisition parameters for low-dose screening chest CT. • Recognize nodule characteristics that lead to suspicion of lung cancer or benignity. • Identify management strategies for indeterminate nodular findings. • Develop structured reporting for lung cancer screening using ACR Lung-RADS®. • Review best practices for interactions with patients.	Free	5
TI-RADS Case Based Review	Webinar	Cased based review and FAQ on the TI-RADS reporting system	Free	1-3
H&N Cancer Surveillance Imaging: ACR NI-RADS	Webinar	Definition and imaging examples and practical application.	Free	1-3
Surveillance Imaging for Head and Neck Cancer: The Rise of NIRADS	Webinar	Definition of “surveillance”, scoring, imaging examples	Free	1-3

Patient Care 2: Clinical Consultation

Patient Care 2: Clinical Consultation				
Level 1	Level 2	Level 3	Level 4	Level 5
Uses electronic health records (EHRs) to obtain relevant clinical information	For emergent and routine radiology consultations, delineates the clinical question, obtains appropriate clinical information, and uses evidence-based imaging guidelines, recommends next steps, with assistance	For complex radiology consultations, delineates the clinical question, obtains appropriate clinical information, and uses evidence-based imaging guidelines, recommends next steps, with assistance	Manages radiology consultations independently, taking into consideration cost effectiveness and risk benefit analysis	Provides comprehensive radiology consultations at the expected level of a subspecialist

The ACR provides the following education for residents to understand evidence-based guidelines for imaging through the ACR Appropriateness Use Criteria and Clinical Decision Support tools:

Education Name	Format	Objectives	Cost	Level
Introduction to the Appropriateness Criteria	eLearning	• Recognize that the ACR AC are evidence-based guidelines that guide physicians on appropriate image ordering and enhance quality of care. • Summarize how to access and use ACR AC. • Articulate how utilization of the AC enhances their professional career and provides quality care with evidence-based medicine.	Free	2
Appropriateness Criteria and Clinical Decision Support Webinar	Webinar	ACR webinar highlighting how facilities are using AUC and CDS to optimize imaging use in the inpatient and outpatient settings and in quality improvement initiatives. In some cases, facilities were able to negotiate with private insurers to replace imaging pre-authorization with CDS.	Free	2
Radiology-TEACHES Clinical Simulation Cases	eLearning	Radiology-TEACHES® features a range of case vignettes integrated with the ACR Appropriateness Criteria® Portal (AC Portal). Through these modules, participants receive clinical decision-support education built on evidence-based content. Learners can practice ordering imaging studies and receive immediate feedback on appropriate image utilization.	Free	2-3
Appropriateness Criteria Portal	Web based portal	Web based content and materials providing evidence-based information for clinical consultation	Free	2-3
Incidental Findings Publications	Publication	Web based content and materials. Each incidental finding guidance document addresses the patient population in which the recommendations apply and provides context for interpretation of the recommendations.	Free	2-3

Patient Care 3: Image Interpretation

Patient Care 3: Image Interpretation				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies primary imaging findings	Identifies secondary and critical imaging findings and formulates differential diagnoses	Prioritizes differential diagnoses and recommends management options	Provides a single diagnosis with integration of current guidelines to recommend management, when appropriate	Demonstrates expertise and efficiency at a level expected of a subspecialist

JACR Literature:

- A Model for Predicting Clinically Significant Prostate Cancer Using Prostate MRI and Risk Factors

The ACR has multiple educational avenues for education on image interpretation:

Education Name	Format	Objectives	Cost	Level
Incidental Findings Publications	Publication	Web based content and materials. Each incidental finding guidance document addresses the patient population in which the recommendations apply and provides context for interpretation of the recommendations.	Free	2-3
Case in Point	eLearning	Daily case-based learning easily accessible and developed by the radiological community and expert subspecialty editors. A large case-based archive is available for residents to search for needed learning.	Free	4
Lung Cancer Screening Education	eLearning	• Describe acquisition parameters for low-dose screening chest CT. • Recognize nodule characteristics that lead to suspicion of lung cancer or benignity. • Identify management strategies for indeterminate nodular findings. • Develop structured reporting for lung cancer screening using ACR Lung-RADS®. • Review best practices for interactions with patients.	Free	4
DXIT Study Guide	eLearning	The new DXIT study guide replicates the In-Training Exam format providing image based questions for the various subspecialites.	Free	1-4
Rectal Cancer Staging Education	eLearning	• Recognizing all relevant stages of locally advanced rectal cancer using optimal MR interpretation guidelines. • Identifying the advantages of structured/synoptic reporting for rectal cancer MRI. • Explaining optimal MR imaging techniques for evaluation of rectal cancer.	Resident discount	5
Continuous Professional Improvement (CPI)	eLearning	Delivering the most current, content-rich casework directly from present-day practices as a self-assessment tool.	Resident discount	4
Education Center	eLearning	High-caliber subspecialty courses for enhanced learning containing unique full-DICOM cases.	Resident discount	1-4
AIRP / Categorical Courses	eLearning	Master rad-path correlation and understand how the underlying pathology of lesions directly influences their imaging appearance. Utilize this knowledge to identify diseases more accurately, guide treatment decisions and anticipate potential complications.	Resident discount	1-3

Patient Care 4: Competencies in Procedures

Patient Care 4: Competence in Procedures				
Level 1	Level 2	Level 3	Level 4	Level 5
Discusses the indications for and assists with procedures	Performs procedures, with direct supervision	Competently performs procedures, with indirect supervision	Proficiently and independently performs procedures as expected of a general radiologist	Proficiently and independently performs procedures expected of a subspecialist
Discusses potential procedural complications	Recognizes complications of procedures and enlists help	Manages complications of procedures, with supervision	Anticipates and independently manages complications of procedures performed by a general radiologist	Proficiently and independently manages complications of procedures performed by a subspecialist

JACR Literature:

- Contemporary Management of Blunt Splenic Trauma in Adults: An Analysis of the Trauma Quality Improvement Program Registry

Education Name	Format	Objectives	Cost	Level
ACR Practice Parameters	Web based portal	ACR® Practice Parameters and Technical Standards (PP&TS) promote the safe and effective use of diagnostic and therapeutic radiology by describing specific training, skills and techniques. PP&TS narrow the variability among radiology practices and provide guidance to achieve quality in radiology.	Free	1

Medical Knowledge 1: Diagnostic Knowledge

Medical Knowledge 1: Diagnostic Knowledge				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of imaging anatomy	Applies knowledge of anatomy to make common imaging diagnoses	Applies knowledge of anatomy to make uncommon imaging diagnoses	Proficiently integrates knowledge of anatomic and molecular imaging with pathophysiology to formulate a diagnosis	Proficiently integrates knowledge of anatomic and molecular imaging with pathophysiology to formulate a diagnosis at the expected level of a subspecialist
Demonstrates knowledge of pathophysiology of disease processes	Applies knowledge of pathophysiology to make common imaging diagnoses	Applies knowledge of pathophysiology to make uncommon imaging diagnoses		
Demonstrates knowledge of cellular and molecular systems	Applies knowledge of cellular and molecular systems to make common imaging diagnoses	Applies knowledge of cellular and molecular systems to make uncommon imaging diagnoses		

JACR Literature:

- A Scoping Review of Risk Presentation in Patient Decision Aids: Communicating Risk in Imaging

The ACR has multiple educational avenues for education on image interpretation for diagnosis:

Education Name	Format	Objectives	Cost	Level
RADS (Assessment Categories)	Publications	ACR Reporting and Data Systems (RADS) serve as a standardized framework for characterizing and reporting imaging findings. The primary objective of ACR RADS is twofold: to facilitate effective communication between radiologists and referring physicians and enhance consistency in terminology across reports.	Free	1-2
Case in Point	eLearning	Daily case-based learning easily accessible and developed by the radiological community and expert subspecialty editors. A large case-based archive is available for residents to search for needed learning.	Free	3
Lung Cancer Screening Education	eLearning	• Describe acquisition parameters for low-dose screening chest CT. • Recognize nodule characteristics that lead to suspicion of lung cancer or benignity. • Identify management strategies for indeterminate nodular findings. • Develop structured reporting for lung cancer screening using ACR Lung-RADS®. • Review best practices for interactions with patients.	Free	4
DXIT Study Guide	eLearning	The new DXIT study guide replicates the In-Training Exam format providing image based questions for the various subspecialites.	Free	1-4
Rectal Cancer Staging Education	eLearning	• Recognizing all relevant stages of locally advanced rectal cancer using optimal MR interpretation guidelines. • Identifying the advantages of structured/synoptic reporting for rectal cancer MRI. • Explaining optimal MR imaging techniques for evaluation of rectal cancer.	Resident discount	3
Continuous Professional Improvement (CPI)	eLearning	Delivering the most current, content-rich casework directly from present-day practices as a self-assessment tool.	Resident discount	4
Education Center	eLearning	High-caliber subspecialty courses for enhanced learning containing unique full-DICOM cases.	Resident discount	1-4
AIRP / Categorical Courses	eLearning	Master rad-path correlation and understand how the underlying pathology of lesions directly influences their imaging appearance. Utilize this knowledge to identify diseases more accurately, guide treatment decisions and anticipate potential complications.	Resident discount	1-4

Medical Knowledge 2: Physics

Medical Knowledge 2: Physics				
Level 1	Level 2	Level 3	Level 4	Level 5
Discusses the basic physics for diagnostic radiology	Demonstrates knowledge of basic medical physics and radiobiology in diagnostic radiology	Applies knowledge of basic medical physics and radiobiology to imaging	Applies physical principles to optimize image quality, including dose reduction strategies	Teaches physical principles to optimize image quality to other specialties

Designed to be an excellent, and at times challenging, teaching and learning tool for general diagnostic radiologists, subspecialists, and residents, this 50-question self-assessment module aims to provide both basic and advanced physics principles as they apply to imaging.

Education Name	Format	Objectives	Cost	Level
Technical Standards	Publication	ACR® Practice Parameters and Technical Standards (PP&TS) promote the safe and effective use of diagnostic and therapeutic radiology by describing specific training, skills and techniques.	Free	1-4
MR Safety Manual	Publication	This document is an educational tool designed to assist practitioners in providing appropriate radiologic care for patients. T	Free	1-5
CPI Physics in Imaging Special Edition Module 2022	eLearning	• Describe how to assess and manage a variety of hypothetical clinical situations related to physics in imaging. • Identify image findings and exercise independent medical judgment based on the images and/or facts provided concerning physics in imaging. • Cite clinical and imaging principles relevant to the cases encountered and topics discussed in the practice of physics in imaging. • Review clinical practice strategies based on the practitioner's self-assessment in the area of physics in imaging.	Resident discount	4

Medical Knowledge 3: Protocol Selection and Contrast Agent Selection/Dosing

Medical Knowledge 3: Protocol Selection and Contrast Agent Selection/Dosing				
Level 1	Level 2	Level 3	Level 4	Level 5
Discusses the protocols and contrast agent/dose for imaging	Selects appropriate protocols and contrast agent/dose for emergent and routine imaging	Selects appropriate protocols and contrast agent/dose for complex imaging	Modifies protocols and contrast agent/dose as determined by clinical circumstances	Develops imaging protocols

ACR provides resources and education to ensure the safe, efficient practice of radiology and contrast media.

Resources:

ACR Contrast Safety Manual
ACR Adult Contrast Reaction Card
ACR Pediatric Contrast Reaction Card
ACR Practice Parameters & Technical Specifications

Available education:

Education Name	Format	Objectives	Cost	Level
Radiology-TEACHES Contrast Safety Module	eLearning	Case vignettes integrated with the ACR Appropriateness Criteria® Portal (AC Portal) and evidence-based clinical decision support.	Free	1-2

Medical Knowledge 4: Imaging Technology and Image Acquisition

Medical Knowledge 4: Imaging Technology and Image Acquisition				
Level 1	Level 2	Level 3	Level 4	Level 5
Discusses imaging technology and image acquisition	Demonstrates knowledge of basic image acquisition and image processing, and recognizes common imaging artifacts and technical problems	Demonstrates knowledge of instrument quality control and image reconstruction and troubleshoots for artifact reduction	Proficiently optimizes image acquisition and processing in collaboration with the technology/imaging team	Presents or publishes research on imaging technology

Clinical data standards are structured frameworks that ensure consistency in how data is collected, formatted, analyzed, and shared across different stages of a clinical trial. These standards are crucial for facilitating data interoperability, reducing errors, improving data quality, and ensuring compliance with regulatory requirements. The ACR has education for residents to understand DICOM standards.

JACR Literature:

- Examining the Effects of a Narrative-Based Educational Animation for Radiology Technologists About Discontinuing Gonadal Shielding
- Ranking the Relative Importance of Image Quality Features in CT by Consensus Survey
- Improving Prostate MR Image Quality in Practice—Initial Results From the ACR Prostate MR Image Quality Improvement Collaborative
- Communicating Diagnostic Certainty in Radiology Reports: Potential Frameworks From the ACR

Education Name	Format	Objectives	Cost	Level
Practice Parameters and Technical Standards	Publication	ACR® Practice Parameters and Technical Standards (PP&TS) promote the safe and effective use of diagnostic and therapeutic radiology by describing specific training, skills and techniques. PP&TS narrows	Free	1-2

		the variability among radiology practices and provides guidance to achieve quality in radiology.		
Healthcare Imaging and Clinical Data Standards - DICOM	eLearning	Understand DICOM, which is the standard that is concerned with transmitting and persisting images and related data between endpoints, querying and retrieving files, performing specific actions such as printing or archiving, supporting digital imaging workflows, and providing high quality images for diagnostics.	Free	1-4

Systems-Based Practice 1: Patient Safety

Systems-Based Practice 1: Patient Safety				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of common patient safety events	Identifies system factors that lead to patient safety events	Participates in analysis of patient safety events (simulated or actual)	Conducts analysis of patient safety events and offers error prevention strategies (simulated or actual)	Actively engages teams and processes to modify systems to prevent patient safety events
Demonstrates knowledge of how to report patient safety events	Reports patient safety events through institutional reporting systems (simulated or actual)	Participates in disclosure of patient safety events to patients and families (simulated or actual)	Discloses patient safety events to patients and families (simulated or actual)	Role models or mentors others in the disclosure of patient safety events

ACR resources to assist you in providing effective imaging and therapy while minimizing potential risk during exposure to ionizing radiation.

ACR® Practice Parameters and Technical Standards (PP&TS) promote the safe and effective use of diagnostic and therapeutic radiology by describing specific training, skills and techniques. These parameters documents are educational tools designed to assist practitioners in providing appropriate radiologic care for patients. They are not inflexible rules or requirements of practice. The purpose of these parameters is to assist practitioners in following a reasonable course of action based on current knowledge, available resources, and the needs of the patient to deliver effective and safe medical care.

Learn about the standards using the ACR Interactive portal:

Practice Parameters and Technical Standards

Additional resources:

Radiation Dose Reference Chart
ACR Manual on MR Safety 2024
ACR Contrast Manual

JACR Literature:

- Incidence of Adverse Events Related to Ballistic Fragments in Patients Undergoing MRI at a Large Urban Health System: Implications for MR Safety Screening

Available education:

Education Name	Format	Objectives	Cost	Level
Radiology-TEACHES Contrast Safety Module	eLearning	Case vignettes integrated with the ACR Appropriateness Criteria® Portal (AC Portal) and evidence-based clinical decision support.	Free	1-4
Image Wisely	eLearning	Search the ACR catalog for a series of cases focused on safety. Sample cases and more available: • Image Wisely Radiation Safety Case - CT Dose SSDE • Image Wisely Radiation Safety Case - CT Brain Perfusion Dose Optimization • Image Wisely Radiation Safety Case - Image Wisely during CT-guided Procedures in Pregnant Patients • Image Wisely Radiation Safety Case - Fundamental MRI Safety: Electromagnetic (EM) Fields • Image Wisely Radiation Safety Case - Low Dose Renal CT • Imaging Wisely When Evaluating for Pulmonary Embolism • Image Wisely - Technical Errors and Image Quality in Digital Radiography • Image Wisely - Dose Management in Endovascular Image-Guided Neuro-Interventions • Image Wisely - Optimizing Radiation Use During a Difficult IVC Filter Retrieval • Image Wisely - C-arm Based Cone Beam CT in Interventional Radiology • Image Wisely - Balancing Image Quality and Radiation Dose in Cardiac CTA • Image Wisely - Child-sizing CT Dose: Optimizing Patient Care Through QI	Free	1-3

Systems-Based Practice 2: Quality Improvement

Systems-Based Practice 2: Quality Improvement				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of basic quality improvement methodologies and metrics	Describes local quality improvement initiatives	Participates in local quality improvement initiatives	Demonstrates the skills required to identify, develop, implement, and analyze a quality improvement project	Creates, implements, and assesses quality improvement initiatives at the institutional or community level

Education on how to choose, plan, and launch an impactful Practice Quality Improvement (PQI) project in this fast-paced webinar recording. Quality experts will explain useful models, go over examples, and answer frequently asked questions to help learners get started on their first project or level up their current PQI game.

JACR Literature:

- Electronic Health Record Improvements to Reduce Emergency Department CT Prescan Times at a Safety-Net Hospital

Education Name	Format	Objectives	Cost	Level
Practice Quality Improvement	eLearning	• Describe ABR requirements for conducting a PQI project. • Identify quality needs within a department. • Outline a structure and model to plan and execute a quality project.	Free	1

Systems-Based Practice 3: System Navigation for Patient-Centered-Care

Systems-Based Practice 3: System Navigation for Patient-Centered Care				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of care coordination in radiology imaging/procedures	Coordinates care of patients in routine radiology imaging/procedures effectively using the roles of interprofessional teams	Coordinates care of patients in complex radiology imaging/procedures effectively using the roles of interprofessional teams	Role models effective coordination of patient-centered care among different disciplines and specialties	Analyzes the process of care coordination and leads in the design and implementation of improvements
Identifies key elements for safe and effective transitions of care and hand-offs	Performs safe and effective transitions of care/hand-offs in routine clinical situations	Performs safe and effective transitions of care/hand-offs in complex clinical situations	Role models safe and effective transitions of care/hand-offs	Improves quality of transitions of care to optimize patient outcomes
Demonstrates knowledge of population and community health needs and disparities	Identifies specific population and community health needs and inequities for their local population	Identifies local resources available to meet the needs of a patient population and community	Participates in adapting the practice to provide for the needs of specific populations (actual or simulated)	Leads innovations and advocates for populations and communities with health care inequities

Population Health Management (PHM) aims to minimize the need for expensive medical interventions by incentivizing healthcare providers to develop new skills and infrastructures to keep a patient population healthy and thriving. The ACR provides a series of webinars on this important topic.

Resources:

Appropriateness Criteria Portal
Incidental Findings Publications

JACR Literature:

- Identity Matters: The Potential for a Frictionless and Secure Patient Experience
- Prevalence of Health-Related Social Needs and Associated Missed Imaging Appointments Among Patients With Cancer

Education Name	Format	Objectives	Cost	Level
Should Radiology Be Involved in Population Health?	Podcast	Define proactive imaging and negative social determinants of health for distinct patient populations, and the costs and benefits of ensuring effective patient follow-up.	Free	2,3,5

		Identify advantages and challenges involved with clinical interventions such as incidental findings management and enforcing adherence to appropriateness criteria. Recognize the benefits and drawbacks of intervening non-clinically to mitigate negative upstream social determinants of health and shore up missed care opportunities. Weigh the pros and cons of designing quality measures within advanced alternative payment models to incentivize radiologists to proactively care for their patients.		
Population Health Management: Using Predictive Analytics to Drive Population Health and Equity in Radiology	Podcast	• Define the various aspects of patient health surveillance and why they are important to ensuring effective patient follow-up. • Identify opportunities to shore up missed care opportunities and incorporate predictive analytics into day-to-day workflow. • Recognize how image-based screening can be used to segment patients into distinct populations based on risk-stratification. • Describe how quality measures within advanced alternative payment models can incentivize radiologists to more proactively care for their patients.	Free	1,2,3,5
Population Health Management: Leveraging Payment Models to Achieve Population Health Management Success: Strategies for Real-World Action	Podcast	• Identify the different risk-sharing APMs (both CMS and private payer models) as they relate to PHM in practice settings ranging from private to academic to community practice. • Recognize how clinical decision support, lexicons, risk stratification systems, and other strategies within health systems can be utilized to manage appropriate imaging of patient populations, and to help design quality measures around such efforts. • Describe screening methodologies that can be used for community-based PHM. • Explain the use of appropriate recommendations for clinical diagnoses and enrolling patients into follow-up programs.	Free	3,4,5
Understanding and Pursuing Health Equity: Opportunities to Take Action	Podcast	• Recognize the ways in which patient testimonials illustrate health inequities and how they may be used to enhance understanding of health disparities. • Define a racial equity plan. • List ways that the COVID-19 pandemic has revealed and exacerbated structural barriers.	Free	4,5

		• Identify the ways in which financial toxicity creates barriers to receiving timely care. • Describe how technology can be leveraged as a tool to promote health equity by improving communication between providers and patients from underserved communities.		
Radiology's Central Role in Patient Screening Program Success	Podcast	• Identify how institutions (both private and academic) can utilize image-based screening to achieve success in different risk-sharing Alternative Payment Models. • Recognize how image-based screening can result in higher patient volume for client hospitals or hospital systems. • Describe the challenges involved in setting up a lung cancer screening program, including financial and logistical hurdles for implementation. • Explain how radiologists can work with local communities and regions to drive population health management via screening adoption.	Free	1-5

Systems-Based Practice 4: Physician Role in Health Care Systems

Systems-Based Practice 4: Physician Role in Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Identifies key components of the complex healthcare system (e.g., hospital, finance, personnel, technology)	Describes how components of a complex health care system are inter-related, and how this impacts patient care	Discusses how individual practice affects the broader system (e.g., length of stay, readmission rates, clinical efficiency)	Manages various components of the complex health care system to provide efficient and effective patient care and transition of care	Advocates for or leads systems change that enhances high-value, efficient, and effective patient care and transition of care
Describes the mechanisms for reimbursement, including types of payors	States relative cost of common procedures	Describes the technical and professional components of imaging costs	Describes the radiology revenue cycle and measurements of productivity (e.g., relative value units)	Participates in health policy advocacy activities

JACR Literature:

Current Challenges in Estimating the Pediatric Radiology Workforce and Access to Pediatric Radiology Care in the United States

Factors Influencing Radiologist Performance in the Merit-Based Incentive Payment System

Education Name	Format	Objectives/Description	Cost	Level

RLI Health Care Economics Milestones Program	eLearning	Designed specifically to address this entire ACGME sub-competency and teach residents about health care economics and the physician role in health care systems. Residents will learn how radiologists get paid for their work and gain perspective on how payment reforms and emerging technologies might affect practice in the future. This program will address every milestone mentioned above.	$200/resident (residency programs sign up a minimum of 4 residents; individuals cannot register themselves	1 - 5
RLI Leadership Essentials (business of radiology lecture)	eLearning	As part of the LE 201 program (offered every other year), participants are provided with an introduction into health care economics and the business of radiology. This is one lecture of the 8-lecture course.	Free for ACR members	1

Systems-Based Practice 5: Contrast Agent Safety

Systems-Based Practice 5: Contrast Agent Safety				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of contrast reactions	Recognizes contrast reactions (simulated or actual)	Manages contrast reactions, with supervision (simulated or actual)	Independently manages contrast reactions (simulated or actual)	Leads educational experience in simulation laboratory for contrast reaction

ACR provides resources and education to ensure the safe, efficient practice of radiology and contrast media.

Resources:

ACR Contrast Safety Manual
ACR Adult Contrast Reaction Card
ACR Pediatric Contrast Reaction Card

JACR Literature:

- Negotiating Gadolinium Supply Chain Instability Amid a Global Trade War

Available education:

Education Name	Format	Objectives	Cost	Level
Radiology-TEACHES Contrast Safety Module	eLearning	Case vignettes integrated with the ACR Appropriateness Criteria® Portal (AC Portal) and evidence-based clinical decision support.	Free	1-2
Image Wisely	eLearning	Search the ACR catalog for a series of cases focused on safety. Sample cases and more available: • Image Wisely Radiation Safety Case - CT Dose SSDE • Image Wisely Radiation Safety Case - CT Brain Perfusion Dose Optimization	Free	1

		• Image Wisely Radiation Safety Case - Image Wisely during CT-guided Procedures in Pregnant Patients		

Systems-Based Practice 6: Radiation Safety

Systems-Based Practice 6: Radiation Safety				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of the mechanisms of radiation injury and the ALARA ("as low as reasonably achievable") concept	Accesses resources to determine exam-specific average radiation dose information	Communicates the relative risk of exam-specific radiation exposure to patients and practitioners	Applies principles of ALARA in daily practice	Creates, implements, and assesses radiation safety initiatives at the institutional level

The Radiation Dose Reference Chart lists common imaging examination doses, updated to reflect the data presented in NCRP Report No. 184 and the Joint AAPM Task Group 282/EFOMP Working Group Report on breast dosimetry.

Radiation Dose Reference Chart

Resources:

ACR® Practice Parameters and Technical Standards (PP&TS) promote the safe and effective use of diagnostic and therapeutic radiology by describing specific training, skills and techniques. These parameters documents are educational tools designed to assist practitioners in providing appropriate radiologic care for patients. They are not inflexible rules or requirements of practice. The purpose of these parameters is to assist practitioners in following a reasonable course of action based on current knowledge, available resources, and the needs of the patient to deliver effective and safe medical care.

Learn about the standards using the ACR Interactive portal:

Practice Parameters and Technical Standards

Available education:

Education Name	Format	Objectives	Cost	Level
Image Wisely	eLearning	Search the ACR catalog for a series of cases focused on safety. Sample cases and more available: • Image Wisely Radiation Safety Case - CT Dose SSDE • Image Wisely Radiation Safety Case - CT Brain Perfusion Dose Optimization • Image Wisely Radiation Safety Case - Image Wisely during CT-guided Procedures in Pregnant Patients • Image Wisely Radiation Safety Case - Low Dose Renal CT • Imaging Wisely When Evaluating for Pulmonary Embolism • Image Wisely - Technical Errors and Image Quality in Digital Radiography • Image Wisely - Dose Management in Endovascular Image-Guided Neuro-Interventions	Free	1

		• Image Wisely - Optimizing Radiation Use During a Difficult IVC Filter Retrieval • Image Wisely - C-arm Based Cone Beam CT in Interventional Radiology • Image Wisely - Balancing Image Quality and Radiation Dose in Cardiac CTA • Image Wisely - Child-sizing CT Dose: Optimizing Patient Care Through QI		

Systems-Based Practice 7: MRI Safety

Systems-Based Practice 7: Magnetic Resonance (MR) Safety				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of the risks of magnetic resonance imaging (MRI), including safety zones and pre-MR screening	Accesses resources to determine the safety of implanted devices and retained foreign bodies	Communicates MR safety, including implants and retained foreign bodies, to patients and practitioners	Applies principles of MR safety to daily practice	Creates, implements, and assesses MR safety initiatives at the institutional level

The 2024 Manual on MR Safety is now available to download. The manual builds on prior editions and includes substantial new content and safety recommendations as well as addresses new challenges that face contemporary MR practices. The manual is intended for use by MR practitioners, technologists, medical physicists, administrators and other healthcare professionals.

MRI Safety Manual

Available education:

Education Name	Format	Objectives	Cost	Level
Image Wisely	eLearning	• Image Wisely Radiation Safety Case - Fundamental MRI Safety: Electromagnetic (EM) Fields	Free	1

Systems-Based Practice 8: Informatics

Systems-Based Practice 8: Informatics				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates familiarity with information systems, including EHR, radiology information system, and picture archiving system	Demonstrates familiarity with information standards in radiology, and describes their roles	Describes approaches to capture and integrate data from radiology examinations into medical decision making	Applies knowledge of information systems, standards, and data to support radiology initiatives, as appropriate	Participates in operational and strategic information systems meetings; applies informatics knowledge to help guide direction and operation of the radiology department

Clinical data standards are structured frameworks that ensure consistency in how data is collected, formatted, analyzed, and shared across different stages of a clinical trial. These standards are crucial for facilitating data interoperability, reducing errors, improving data quality, and ensuring compliance with regulatory requirements. The ACR has education for residents to understand DICOM standards.

Resources:

JACR Literature:

- Opinions and Preferences Regarding Artificial Intelligence Use in Health Care Delivery: Results From a National Multisite Survey of Breast Imaging Patients

Education Name	Format	Objectives	Cost	Level
ACR–AAPM–SIIM Technical Standard for Electronic Practice of Medical Imaging	Publication	This technical standard defines goals, qualifications of personnel, equipment guidelines, specifications of data manipulation and management, and quality control and quality assurance (QA) procedures for the use of digital image data that should result in high-quality radiological care. A glossary of commonly used terminology (Appendix A) and a reference list are included.	Free	1
Consensus, Frameworks, and Best Practices in A Review of Cybersecurity and Privacy Standards in Medical Imaging	Publication	This article presents a narrative review of cybersecurity and privacy standards specific to medical imaging, examining evolving industry trends and regulations to describe the broader global forces shaping the need for a security strategy. We then provide frameworks to define the core facets of data protection, along with the relevant administrative, technical, and physical safeguards. Rather than serving as a stand-alone, comprehensive guide, this article provides an overview and actionable starting point for professionals to take steps toward securing normal radiology operations.	Free	1-2
Healthcare Imaging and Clinical Data Standards - DICOM	eLearning	Understand DICOM, which is the standard that is concerned with transmitting and persisting images and related data between endpoints, querying and retrieving files, performing specific actions such as printing or archiving, supporting digital imaging workflows, and providing high quality images for diagnostics.	Free	1-4

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice

Practice-Based Learning and Improvement 1: Evidence-Based and Informed Practice				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates how to access and use available evidence to determine the best imaging examination for a routine patient/diagnosis	Articulates clinical questions and elicits patient preferences and values in order to guide evidence-based imaging	Locates and applies the best available evidence, integrated with patient preferences and values, to the care of complex patients	Critically appraises conflicting evidence to guide care, tailored to the individual patient	Coaches others to critically appraise and apply evidence for complex patients; and/or participates in the development of guidelines

The ACR provides evidence-based guidelines to assist referring physicians and other providers in making the most appropriate imaging or treatment decision.

- Appropriateness Criteria

JACR Literature:

- Impact of the COVID-19 Pandemic on Breast Biopsy Delays: Factors Contributing to Disparities Across Prepandemic, Shutdown, and Postshutdown Periods

Available education:

Education Name	Format	Objectives	Cost	Level
Introduction to the Appropriateness Criteria	eLearning	• Recognize that the ACR AC are evidence-based guidelines that guide physicians on appropriate image ordering and enhance quality of care. • Summarize how to access and use ACR AC. • Articulate how utilization of the AC enhances their professional career and provides quality care with evidence-based medicine.	Free	1
Appropriateness Criteria and Clinical Decision Support Webinar	Webinar	ACR webinar highlighting how facilities are using AUC and CDS to optimize imaging use in the inpatient and outpatient settings and in quality improvement initiatives. In some cases, facilities were able to negotiate with private insurers to replace imaging pre-authorization with CDS.	Free	1
Radiology-TEACHES Clinical Simulation Cases	eLearning	Radiology-TEACHES® features a range of case vignettes integrated with the ACR Appropriateness Criteria® Portal (AC Portal). Through these modules, participants receive clinical decision-support education built on evidence-based content. Learners can practice ordering imaging studies and receive immediate feedback on appropriate image utilization.	Free	1-2

Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Professional Growth

Practice-Based Learning and Improvement 2: Reflective Practice and Commitment to Professional Growth				
Level 1	Level 2	Level 3	Level 4	Level 5
Accepts responsibility for professional development by establishing goals	Receptive to performance data and feedback in order to adjust goals	Episodically seeks performance data and feedback, with humility and adaptability	Consistently seeks performance data and feedback with humility and adaptability	Coaches other learners to consistently seek performance data and feedback
Identifies factors which contribute to gap(s) between expectations and actual performance	Analyzes and reflects on factors which contribute to gap(s) between expectations and actual performance	Analyzes, reflects on, and institutes behavioral change(s) to narrow the gap(s) between expectations and actual performance	Analyzes effectiveness of behavioral changes where appropriate and considers alternatives in narrowing the gap(s) between expectations and actual performance	Coaches others on reflective practice
Actively seeks opportunities to improve performance	Designs and implements a learning plan, with prompting	Designs and implements a learning plan independently	Uses performance data to measure the effectiveness of the learning plan and when necessary, improves it	Facilitates the design and implements learning plans for others

JACR Literature:

- Inpatient Imaging Utilization and Radiology Workload: Trends of the Past Decade and Through the COVID-19 Pandemic
- Trends in Academic Radiology Faculty Promotion in US Medical Schools

Education Name	Format	Objectives/Description	Cost	Level
Kickstart Your Career: Career Confidence Collection	eLearning	This on-demand program is designed to guide radiology residents through the transition from training to their first job. In addition to the lectures, residents will have the opportunity to be matched with a mentor (for 1 year) who will help them achieve their professional goals.	$35 for MIT (13 lectures)	1 - 4
RLI Summit Pre-Conference: Resident and Young Physician Leadership Program	In-Person	Residents will gain practical strategies to thrive in their first year of practice and beyond. Each year focuses on today's current challenges, how those impact the field, and how to overcome them.	Free (pre-conference only)	1-5

Professionalism 1: Professional Behavior and Ethical Principles

Professionalism 1: Professional Behavior and Ethical Principles				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of expectations for professional behavior and describes how to appropriately report professional lapses	Demonstrates insight into professional behavior in routine situations and takes responsibility for own professionalism lapses	Demonstrates professional behavior in complex or stressful situations	Recognizes situations that may trigger professionalism lapses and intervenes to prevent lapses in self and others	Coaches others when their behavior fails to meet professional expectations
Demonstrates knowledge of the ethical principles underlying informed consent, surrogate decision making, advance directives, confidentiality, error disclosure, and stewardship of limited resources	Analyzes straightforward situations using ethical principles	Recognizes need to seek help in managing and resolving complex ethical situations	Recognizes and uses appropriate resources for managing and resolving ethical dilemmas as needed (e.g., ethics consultations, literature review, risk management/legal consultation)	Identifies and seeks to address system-level factors that induce or exacerbate ethical problems or impede their resolution

JACR Literature:

- Understanding and Applying the Principles of Contemporary Medical Professionalism: Illustration of a Suggested Approach, Part 1
- Understanding and Applying the Principles of Contemporary Medical Professionalism: Illustration of a Suggested Approach, Part 2
- Professionalism Training in the Post–COVID-19 Era

Education Name	Format	Objectives/Description	Cost	Level
RLI Leadership Essentials 101 (professionalism lecture)	eLearning	As part of the LE 101 program (offered every other year), participants are provided with a lecture on professionalism. This lecture goes in-depth on expectations of professionalism and professional behavior, current trainee expectations of their professional roles and developing action next steps to align traditional faculty and new trainee expectations of their roles, behaviors, and accountability in the workplace.	free	1-5
Kickstart Your Career: Career Confidence Collection	eLearning	Individual lectures are available for purchase, or you may purchase the collection of 13 lectures. Lecture titled, **I Need Help! Mentoring and Professionalism,** addresses professional expectations in today's workplace and leveraging mentors for feedback and guidance. Lecture titled, **Grace Under Fire: Navigating Tough Personalities with Ease**, addresses effective communications when opinions differ and lead to	$8 MIT for individual lecture; $35 for the collection	1-5

		emotional distress. Lecture titled, **Interviewing for Success: Secrets from The Wharton School**, gives clear examples of professionalism, expectations and how to overcome unethical questions in a job interview setting.		

Professionalism 2: Accountability/Conscientiousness

Professionalism 2: Accountability/Conscientiousness				
Level 1	Level 2	Level 3	Level 4	Level 5
Responds promptly to requests or reminders to complete tasks and responsibilities	Performs tasks and responsibilities in a timely manner to ensure that the needs of patients, teams, and systems are met in routine situations	Performs tasks and responsibilities in a timely manner to ensure that the needs of patients, teams, and systems are met in complex or stressful situations	Recognizes and raises awareness of situations that may impact others' ability to complete tasks and responsibilities in a timely manner	Takes ownership of system outcomes

JACR Literature:

- Improving Professionalism Between Radiology and Emergency Medicine
- Incorporating Professionalism in Patient Safety Programs: An Introduction for Radiologists

Education Name	Format	Objectives/Description	Cost	Level
RLI Leadership Essentials 101 (professionalism lecture)	eLearning	As part of the LE 101 program (offered every other year), participants are provided with a lecture on professionalism. This lecture goes in-depth on expectations of professionalism and professional behavior, current trainee expectations of their professional roles and developing action next steps to align traditional faculty and new trainee expectations of their roles, behaviors, and accountability in the workplace.	free	1-5
Kickstart Your Career: Career Confidence Collection	eLearning	Individual Lecture: **I Need Help! Mentoring and Professionalism** This individual lecture is available for individual purchase and addresses professional expectations in today's workplace. Additionally, the importance of mentorship and how to leverage their guidance is discussed.	$8 MIT for individual lecture; $35 for the collection	1-5

Professionalism 3: Self-Awareness and Help-Seeking

Professionalism 3: Self-Awareness and Help Seeking				
Level 1	Level 2	Level 3	Level 4	Level 5
Recognizes status of personal and professional well-being, with assistance, and is aware of available resources	Independently recognizes status of personal and professional well-being using available resources when appropriate	With assistance, proposes a plan to optimize personal and professional well-being	Independently develops a plan to optimize personal and professional well-being	Coaches others when emotional responses or limitations in knowledge/skills do not meet professional expectations
Recognizes limits in the knowledge/skills of self or team, with assistance	Independently recognizes limits in the knowledge/skills of self or team and demonstrates appropriate help-seeking behaviors	With assistance, proposes a plan to remediate or improve limits in the knowledge/ skills of self or team	Independently develops a plan to remediate or improve limits in the knowledge/skills of self or team	

The Accreditation Council for Graduate Medical Education (ACGME) regularly updates Section VI of its Common Program Requirements for all accredited residency and fellowship programs regardless of specialty to address well-being more directly and comprehensively. The updated requirements below emphasize that psychological, emotional, and physical well-being are critical in the development of the competent, caring, and resilient physician. The ACR joins the ACGME in prioritizing physician well-being.

ACR Resources:

- Well-Being Support Guides for Physicians, Residents and Students

Available education:

Education Name	Format	Objectives/Description	Cost	Level
Well-Being Curriculum	PDF with associated videos	The curriculum for radiology residency program leaders provides resources and experiential exercises to strengthen your residency and meet the VI.C. Well-Being requirements.	Free	1-2
RLI Leadership Essentials 101 (professionalism lecture)	eLearning	As part of the LE 101 program (offered every other year), participants are provided with a lecture on professionalism. This lecture goes in-depth on expectations of professionalism and professional behavior, current trainee expectations of their professional roles and developing action next steps to align traditional faculty and new trainee expectations of their roles, behaviors, and accountability in the workplace.	free	1-5
Kickstart Your Career: Career Confidence Collection	eLearning	Individual Lecture: **I Need Help! Mentoring and Professionalism** This individual lecture is available for individual purchase and addresses professional expectations	$8 MIT for individual lecture; $35	1-5

		in today's workplace. Additionally, the importance of mentorship and how to leverage their guidance is discussed.	for the collection	
Kickstart Your Career: Career Confidence Collection	eLearning	Individual Lecture: **Grace Under Fire: Navigating Tough Personalities with Ease** This individual lecture is available for individual purchase and addresses effective communication, considering the other perspective, and how to find a middle ground.	$8 MIT for individual lecture; $35 for the collection	5

Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication

Interpersonal and Communication Skills 1: Patient- and Family-Centered Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Accurately communicates own role within the health care system Identifies the need to adjust communication strategies based on assessment of patient/family expectations and understanding of their health status and treatment options	Identifies barriers to effective communication (e.g., language, health literacy, cultural) Organizes and initiates communication with patient/family by clarifying expectations and verifying understanding of the clinical situation	Identifies biases that hinder effective communication With guidance, sensitively and compassionately delivers medical information, elicits patient goals and preferences, and acknowledges uncertainty and conflict	Actively minimizes communication barriers Independently, uses shared decision making to align patient goals, and preferences with treatment options to make a personalized care plan	Coaches other learners to minimize communication barriers Coaches other learners in shared decision making

Resources:

ACR AC Patient Friendly Summaries

JACR Literature:

- Radiology Trainees' Comfort With Difficult Conversations and Attitudes About Error Disclosure: Effect of a Communication Skills Workshop
- Determination and Communication of Critical Findings in Neuroradiology
- Content and Style of Radiation Risk Communication for Pediatric Patients
- Communication Errors in Radiology: A Liability Cost Analysis
- Radiologist-Patient Communication: Current Practices and Barriers to Communication in Breast Imaging

Available Education:

Education Name	Format	Objectives/Description	Cost	Level
Residency Program Communication Curriculum	PDF with associated videos & simulations	• Define the essential elements of communication skills. • Provide examples of good and poor communication skills and provide a framework to practice communication skills. • Use tools to evaluate communication skills.	Free	1-5

		• Understand the relationship between communication and patient experience.		
RLI Leadership Essentials 101 (Effective Communication Skills)	eLearning	As part of the LE 101 program (offered every other year), faculty provides a lecture on effective communication skills. This lecture explores how success as a leader is multifactorial, highlighting effective communication as a cornerstone—encompassing adaptable communication styles, active listening, skillful use of elevator pitches, and the ability to navigate the inevitable conflicts that often stem from poor communication.	Free	1-4
Talking to Your Patients About Breast Cancer Screening	eLearning	• Summarize the differences between data derived from randomized, controlled trials, prospective studies, and modeling studies, and how data from each should be appropriately factored into breast cancer screening recommendations to patients. • Describe the risks and benefits associated with modern breast cancer screening techniques. • Explain methods used to convey accurate information to patients to promote informed shared decision-making regarding breast cancer screening. • Recognize the impact current racial, ethnic, and regional disparities have on breast cancer screening trends.	Free	1

Interpersonal and Communication Skills 2: Interprofessional and Team Communication

Interpersonal and Communication Skills 2: Interprofessional and Team Communication				
Level 1	Level 2	Level 3	Level 4	Level 5
Respectfully receives a consultation request	Clearly and concisely responds to a consultation request	Checks understanding of recommendations when providing consultation	Coordinates recommendations from different members of the health care team to optimize patient care	Role models flexible communication strategies that value input from all health care team members, resolving conflict when needed
Demonstrates knowledge of the institutional and national communication guidelines	Communicates emergent findings according to institutional or national guidelines	Communicates non-emergent findings where failure to act may adversely affect patient outcome	Communicates findings and management options (as appropriate) which are tailored to the referring provider	Coaches other learners in tailored communications to referring providers

JACR Literature:

- Handoffs in Radiology: Minimizing Communication Errors and Improving Care Transitions

Interpersonal and Communication Skills 3: Communication within Health Care Systems

Interpersonal and Communication Skills 3: Communication within Health Care Systems				
Level 1	Level 2	Level 3	Level 4	Level 5
Demonstrates knowledge of institutional communications policies	Communicates appropriately as required by institutional policy	Communicates systems concerns in a respectful manner	Communicates clear and constructive suggestions to improve systems	Facilitates dialogue regarding systems issues among larger community stakeholders (institution, health care system, field)

Available Education:

Education Name	Format	Objectives/Description	Cost	Level
RLI Leadership Essentials 101 (Effective Communication Skills)	eLearning	As part of the LE 101 program (offered every other year), faculty provide a lecture on effective communication skills. This lecture explores how success as a leader is multifactorial, highlighting effective communication as a cornerstone—encompassing adaptable communication styles, active listening, skillful use of elevator pitches, and the ability to navigate the inevitable conflicts that often stem from poor communication.	Free	1-4

Research Activity

Healthcare Delivery & Policy Research Course

This FREE virtual course introduces residents to key concepts in health policy research, comparative effectiveness research, and big data analytics from top researchers in the field lead by Course Director, Stella Kang, MD, professor of radiology and vice chair of clinical research for the Department of Radiology at Columbia University Irving Medical Center, and Co-Director, Pina Sanelli, MD.

The online lectures touch upon the following topics:

1. Big Data, Predictive Analytics, and Machine Learning in Imaging
2. Measuring Value in Imaging with Costs and Outcomes
3. Decision Analysis and Evidence Synthesis to Influence Policy
4. Innovative Comparative Effectiveness Trial Designs for Imaging
5. Translating Evidence into Policies and Practice
6. Career Tracks at the Intersection of Health Policy and Radiology

Research activity involves:

- Study Design: Understanding and applying principles of study design, data collection, and analysis.
- Performance: Conducting research under faculty supervision, ensuring proper methodology and ethical standards.
- Reporting: Analyzing and reporting research results, often culminating in presentations or publications.

These activities are essential for residents and fellows to develop critical thinking, evidence-based practice, and contribute to the medical community's knowledge base.

Additional Resources related to Research:

JACR Podcast Series: Contrast and Clarity with the JACR highlights the Harvey L. Neiman Health Policy Institute and their research work in radiology.

- Episode 6. Nonphysician Practitioners and Imaging Interpretation with our Director of Research
- Episode 13. Planning for the Future: Radiology Workforce and Imaging Utilization
- Episode 19. Decoding MIPS Performance: A Radiologist's Guide
- Episode 20. Beyond the Image: Unlocking Hidden Value in CT Scans
- Episode 22. The Scan-demic: Unpacking the Environmental Impact of Inappropriate Imaging

LCME Lecture Series for Academia

ACR-AMSER-APDR Lecture Series For LCME

This lecture series features recognized experts in pedagogical training in radiology for residents interested in the academic field of radiology or medical student education. Topics were selected to cover a broad range of teaching methods and tools and are applicable both for radiology residents as well as residents from other medical specialties.

Scholarly Activity

Scholarly activity in ACGME-accredited programs typically includes:

- Research Projects: Conducting research studies, which can be clinical, laboratory-based, epidemiologic, or quality improvement-focused.
- Publications: Writing and submitting manuscripts for peer-reviewed journals.
- Presentations: Presenting research findings at local, regional, national, or international scientific meetings.
- Educational Materials: Developing educational resources, such as textbooks, manuals, or curriculum.

AIRP Course Case Submission and Case in Point offer opportunities for residents to complete scholarly activity requirements. Residents may also search our Volunteer Link for other educational, publication and projects to fulfill this requirement.

Assessments

ACR in-training exams offer residents an opportunity to evaluate their knowledge and to identify areas of deficiency relative to peers at the same level of training and residency programs an opportunity to Evaluate their program using national benchmarking and scale individual resident scores for all residency levels.

Education Name	Format	Objectives	Cost
DXIT	Online assessment	The DXIT™ Exam is scheduled annually in January for first- through fourth-year diagnostic and interventional radiology residents, as well as those in fellowships.	Group subscription
RadExam	Online assessment	The American College of Radiology® (ACR®) created RadExam® in collaboration with the Association of Program Directors in Radiology (APDR) to provide examinations and iterative testing that empower and prepare the next generation of radiologists.	Group subscription
Continuous Professional Improvement (CPI)	eLearning	The ACR® Continuous Professional Improvement (CPI) program provides a wealth of current subspeciality casework through 50 or more self-assessment questions with robust explanations.	Resident discount

Contact Information

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General Education	https://www.acr.org/Contact