The American College of Radiology Accreditation Overview

Leonard Lucey
Legal Counsel & Accreditation Senior Director,

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Who is the ACR?

- Membership organization - 36,000 radiology professionals
  - Medical Physicists
  - Diagnostic/interventional radiologists
  - Nuclear medicine physicians
  - Radiation oncologists
Who is the ACR?

- **Our mission is to serve patients and society**
  - Advance the science of radiology
  - Improve the quality of patient care
  - Provide continuing education for radiology and allied health professions
  - Conduct research

Accreditation Definition

A process whereby a professional association or nongovernmental agency grants recognition to a school or health care institution for demonstrated ability to meet predetermined criteria for established standards.
ACR Accreditation Program Milestones

- 1987 Mammography (federally mandated by MQSA in 1992)
- 1987 Radiation Oncology
- 1995 Ultrasound
- 1996 Stereotactic Breast Biopsy
- 1996 MRI
- 1997 Vascular Component added to Ultrasound
- 1998 Ultrasound-Guided Breast Biopsy
- 1999 Nuclear Medicine
- 2000 Breast Ultrasound added to US-Guided Breast Biopsy

- 2002 Positron Emission Tomography module added to Nuclear Medicine
- 2002 Computed Tomography
- 2002 General Radiography and Fluoroscopy
  - Discontinued in 2005 due to poor participation
- 2007 Cardiac MR Module
- 2007 Breast Imaging Centers of Excellence initiative
- 2008 Modular MRI
- 2010 Approved as accrediting organization by CMS
- 2010 Added Breast MRI
ACR Accreditation Participation

<table>
<thead>
<tr>
<th>Program</th>
<th>Accredited Facilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mammography</td>
<td>8133</td>
</tr>
<tr>
<td>Stereotactic breast biopsy</td>
<td>1104</td>
</tr>
<tr>
<td>Breast MRI</td>
<td>1982</td>
</tr>
<tr>
<td>Breast Ultrasound</td>
<td>1701</td>
</tr>
<tr>
<td>MRI</td>
<td>6841</td>
</tr>
<tr>
<td>CT</td>
<td>6244</td>
</tr>
<tr>
<td>Nuclear Medicine</td>
<td>3175</td>
</tr>
<tr>
<td>PET</td>
<td>1399</td>
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<tr>
<td>Ultrasound</td>
<td>3865</td>
</tr>
<tr>
<td>Radiation oncology</td>
<td>600</td>
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</tbody>
</table>

ACR Staff and Member Volunteers

- Technologists registered & certified
- Clinical and phantom reviewers- 300
- Board certified radiologists
- Board certified medical physicists
Accreditation Committees

- Experience as a reviewer
- Pediatric representative
- Private practice representative
- Small and rural representative

Modality (MRI) Information

- Program overview
- Program Requirements
- Applying for accreditation
- Testing and QC forms
- Toolkit for site visits
Program Requirements

- PDF document
- Personnel qualifications
- Equipment
- QC/QA
- Accreditation testing

Testing and QC Forms

- Clinical image quality guide
- Testing instructions
- Clinical test image data form
Accreditation Forms

- Survey Agreement
- HIPPA Business Associate Agreement
- Modality forms
- Personnel list
- Equipment list
- Application instructions & check list

Why get accredited?

- ACR accreditation personnel requirements for:
  - Supervising and reading physician
  - Medical physicist
  - Radiological technologist

- What is looked at?
  - Initial qualifications
  - Continuing experience (MDs and MPs only)
  - Continuing education
Why get accredited?

- ACR accreditation assesses *clinical image quality*

Why get accredited?

- ACR accreditation requires physics testing

- Physics requirements can include:
  - Quality Control (QC) testing
  - Annual System Performance Evaluation
  - Corrective action documentation (if needed)
  - Phantom Image submission
Role of Phantoms

- Phantoms are used to test medical imaging equipment; to ensure proper working order and adequate image quality for diagnostic/therapeutic use
- Maintains an even playing field for all facilities applying for accreditation

Role of Phantoms (cont)

- Using phantoms to test equipment allows for earlier detection of problems:
  - Before they decrease image quality (don’t get a clear picture)
  - Might not be apparent when imaging patients, due to patient variability
Image uniformity section of Nuclear Medicine Phantom

Image uniformity section of the large MRI phantom
Dose Requirements

- ACR accreditation assesses dose in CT imaging.

<table>
<thead>
<tr>
<th>Examination</th>
<th>Pass/Fail Criteria (mGy)</th>
<th>Reference Levels (mGy)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult Head</td>
<td>80</td>
<td>70</td>
</tr>
<tr>
<td>Adult Abdomen</td>
<td>30</td>
<td>25</td>
</tr>
<tr>
<td>Pediatric Head (1 year old)</td>
<td>40</td>
<td>35</td>
</tr>
<tr>
<td>Pediatric Abdomen (40-50 lb)</td>
<td>20</td>
<td>15</td>
</tr>
</tbody>
</table>

Physician Peer Review

- Sites must actively participate in a physician peer review program that performs the following functions:
  - Double reading
  - Random selection of images
  - Exams represent actual clinical practice
  - Review assessment of the agreement of the original report with subsequent review
Physician Peer Review

- A classification of peer review finding
- P and Ps for action to be taken on significant findings
- Summary stats and comparisons generated for each physician by imaging modality
- Summary data for each facility/practice by modality

ACR Accreditation- A Four Part Process

- Part 1 - Application
  - Practice Site, personnel, policies & procedures
  - Basic modality and unit information collected
- Part 2 - Testing Materials
  - Evaluation of equipment
  - Quality control procedures
  - Clinical and phantom Images
- Part 3 – Review by radiologist, medical physicist & ACR professional staff
- Part 4 – Final Report (pass/fail)
  - Appeal Process
- Other Aspects
  - On-Site surveys
Accreditation Updates

- Updated personnel requirements
- CT QC Manual
- CMS requirements
  - Primary source verification
  - Consumer complaint policy
  - Unannounced site visits
- Electronic submission of images
- DICOE

CT Quality Control Manual

- The CT QC Manual was released Dec 1, 2012.

- Effective one year from the publication all facilities applying for accreditation must maintain a documented quality control (QC) program and must comply with the minimum frequencies of testing outlined in the manual.
CT Quality Control Manual

- New digital format
- Access it on the ACR website
- Free for sites that are going through CT accreditation

What are advanced diagnostic imaging services (ADIS)

- Magnetic Resonance Imaging
- Computed Tomography
- Nuclear Medicine
- Position Emission Tomography (PET)
What Imaging Modalities are Excluded?

- X-Ray
- Ultrasound
- Fluoroscopy

Primary Source Verification

- Every site needs to have a formal procedure to verify the credentials of their employees

- Most licensing and certifying bodies provide the ability to verify an individual’s credentials online
Primary Source Verification

- For example, to verify a physician’s medical license they would check the physician licensing board in their state. Example: [http://www.mbp.state.md.us/bpqapp/](http://www.mbp.state.md.us/bpqapp/)

- For technologists, they can use their specific certifying agency. Example: [https://www.arrt.org/](https://www.arrt.org/)

Consumer Complaints

CMS Requires:

- Policy on consumer complaints

- Posted notice for patients listing consumer complaint contact information
Unannounced Validation Site Surveys (VSS)

- The ACR conducts validation site surveys on accredited facilities to monitor compliance with accreditation standards and to meet the requirements of MIPPA

- Each accredited facility will go through a site visit within the three year accreditation period
What is Reviewed on a VSS

- Site’s QC and QA program
- Policies and procedures
- Personnel qualifications
- Physician peer review
- Labeling of images
- Patient reports for compliance with ACR Practice Guideline for Communication of Diagnostic Imaging Findings

Outcomes (to date)
Diagnostic Image Center of Excellence (DICOE)

- Provides a comprehensive assessment of the entire medical imaging enterprise including structure and outcomes

DICOE

**Basic Criteria**

- ACR accreditation in all modalities
- Dose Index Registry® (DIR) and General
- Radiology Improvement Database (GRID) participation
- Image Gently® and Image Wisely® pledges
- Site survey
DICOE

Benefits

- Comprehensive assessment of the medical imaging facility, including structure and outcomes
- Participation in ACR registries at no cost
- Ongoing process for self-assessment
- Recognition that distinguishes your facility to providers, payers, patients and administrators
- Three-year status
- Customizable materials for local public relations and marketing

The End