ACR NUCLEAR MEDICINE & PET ACCREDITATION

Presented by:
Carolyn Richards MacFarlane, MS, CNMT, RT(N)
ACR Quality & Safety
November 12, 2015
ACR Accreditation

- An educational process of self assessment and peer review
  - Modality based
  - Diagnostic image quality
  - Staff qualifications
  - Policies and protocols
  - Equipment specifications
  - Therapeutic treatment
Goals of ACR Accreditation

- Set quality standards for imaging practices
- Provide recommendations for improvement
- Help sites improve quality of patient care
- Recognize quality imaging practices
Why Seek ACR accreditation?

- Validate good practice through peer-review
- May document need for new or dedicated equipment, continuing education or qualified personnel
- Expert assessment of image quality
- Formal review may be used to meet criteria of state government, federal government or third party payers
Path to Quality Improvement

- ACR Website
  - Practice Parameters/
    Technical Standards
  - FAQs
- QC Manuals
- Professional Staff
- ACR staff
  - Healthcare professionals
  - Certified technologists & rad therapist
- Physicians and physicists
  - Accreditation committees
- Reviewers
Mandatory Accreditation Requirements

- Participation in RADPEER™ or similar physician peer review program
- CME appropriate to physician/physicist practice
- Requirements for continuing physician experience over a specified time
RADPEER™

RADPEER is a simple, cost-effective process that allows peer review to be performed during the routine interpretation of current images. After submission of practice data to the ACR, the group chair or medical director can access the reports online at any time.

The reports provide:
- Summary statistics and comparisons for each participating physician by modality
- Summary data for the group by modality
- Data summed across all RADPEER™ participants

The RADPEER Process

RADPEER is a web-based program that allows submission of scores and acquisition of reports through a secure web site. If, during interpretation of a new examination, there are prior images of the same area of interest, the interpreting physician will typically form an opinion of the previous interpretation while interpreting the new study. If the opinion of the previous interpretation is scored, a peer review event has occurred.
The RADPEER Process

RADPEER is a web-based program that allows submission of scores and acquisition of reports through a secure web site. If, during interpretation of a new examination, there are prior images of the same area of interest, the interpreting physician will typically form an opinion of the previous interpretation while interpreting the new examination. The potential for error due to this phenomenon is well known, and the solution is to incorporate data from all of the radiologists who have interpreted that patient in the past. This web-based program allows peer review to be performed efficiently and effectively.
Alternative peer review program:

- Double reading assessment
- Randomly selected studies, reviewed regularly
- Exams representing each physician’s work
- Original report assessment
- Classification for level of quality concerns of peer review findings
- Policies and procedures for actions on significant discrepancies
- Summary statistics and comparison for each physician by modality
Continuing Experience & CME Physicist

All renewing sites:

- Continuing Experience: Upon renewal, 2 NM camera surveys in prior 24 months

- Continuing Education: Upon renewal, 15 CEU/CME (1/2 Cat 1) in prior 36 months (must include credits pertinent to the accredited modality)
CME Physician

All renewing sites:

- Currently meets the Maintenance of Certification (MOC) for ABR or ABNM
  
  OR

- Completes 150 hours (includes 75 hours of Category 1 CME) in prior 36 months pertinent to the physician’s practice patterns
  
  OR

- Completes 15 hours CME in prior 36 months specific to the modality or organ system (1/2 of which Cat. 1)
Continuing Experience

All renewing sites:

- Currently meets the Maintenance of Certification (MOC) for ABR or ABNM
  
  OR

- Read a minimum of 200 studies/3 years in specific modality
  
  OR

- For physicians reading organ system specific exams (i.e., body, abdominal, MSK, etc.) across multiple modalities must read a minimum of 60 organ system specific studies for the modality in 36 months. However, they must read a total of 200 cross-sectional imaging (MRI, CT, PET/CT and ultrasound) studies over the prior 36 month
Continuing Experience

- Double-reading (two or more physicians interpreting the same examination) acceptable.
- Re-interpret previously interpreted exam & count it towards continuing experience requirement, as long as he/she did not do the initial interpretation.
- Exams reviewed and evaluated for RADPEER™ or an alternative physician peer review program also count.
Preparing for ACR Accreditation

Applying for and achieving ACR accreditation is a team process that involves everyone in the facility.
Do You Image Wisely®?

Now with Fluoroscopy, Nuclear Medicine and CT
Resources on radiation safety in adult medical imaging

www.acr.org
Since 1987, the ACR has accredited more than 35,000 facilities in 10 imaging modalities. The ACR offers accreditation programs in CT, MRI, breast MRI, nuclear medicine and PET as mandated under the Medicare Improvements for Patients and Providers Act (MIPPA) as well as for modalities mandated under the Mammography Quality Standards Act (MQSA). Our streamlined application process has cut approval time in half, with accreditation evaluation typically completed within 90 days of image submission.

- Read Our Accreditation FAQ
- Accreditation How Do I...?
- Payment Worksheet
Since 1987, the ACR has accredited more than 35,000 facilities in 10 imaging modalities. The ACR offers accreditation programs in CT, MRI, breast MRI, nuclear medicine and PET as mandated under the Medicare Improvements for Patients and Providers Act (MIPPA) as well as for modalities mandated under the Mammography Quality Standards Act (MQSA). Our streamlined application process has cut approval time in half, with accreditation evaluation typically completed within 90 days of image submission.

- Read Our Accreditation FAQ
- Accreditation How Do I...?
- Payment Worksheet
The Nuclear Medicine Accreditation Program involves the acquisition of clinical and phantom images and corresponding data for each unit. All providers that bill for nuclear medicine and PET under part B of the Medicare Physician Fee Schedule must be accredited in order to receive technical component reimbursement from Medicare.

Program Requirements

It is required that you carefully read the Diagnostic Modality Accreditation Program Overview for a summary of the accreditation process and the modality-specific program requirements before applying for accreditation.

- Diagnostic Modality Accreditation Program Overview
- Nuclear Medicine Accreditation Program Requirements
- PET Accreditation Program Requirements
- New! Expedite the Accreditation Process with Electronic Image Submission!

Electronic image submission is now available for NM and PET facilities! When completing the accreditation application, select “electronic” for the type of submission. This new option will reduce the turnaround time for accreditation image review. For more information, see the User Instructions for Electronic Submission of Images.
Facilities that have applied for the Nuclear Medicine and PET Accreditation Program will read these documents and use the forms to gather data that will be entered into the online testing package before the images are sent for review. Please note that these forms should not be submitted to the ACR for accreditation.

Testing and QC Forms

- ACR Phantom Criteria
- ACR Phantom Order Form
- ACR Small Phantom Order Form
- Annual Performance Tests
- Instructions for Submission of Testing Materials — NM
- Instructions for Submission of Testing Materials — PET
- Nuclear Medicine Phantom Instructions
- Nuclear Medicine Quality Assurance Questionnaire
- Pass-Fail Notice
- PET Phantom Instructions
- PET Quality Assurance Questionnaire
- Important Information
- SPECT Phantom Video - see video at right

Nuclear Medicine Test Image Data Forms

- Bone SPECT
- Brain SPECT
Frequently Asked Questions (FAQ)

- Nuclear Medicine and PET Accreditation Program FAQ
- ACR CT, MRI, Nuclear Medicine and PET Accreditation Program Requirements for Medical Physicists/MR Scientists

Apply for Accreditation

An online accreditation system is available for the Nuclear Medicine and PET Accreditation Program. Existing facilities that have already applied with the ACR for this program should access the system for the first time by following the steps in the account activation document below. Facilities applying for nuclear medicine and/or PET for the first time can follow the link to the online system and click the link to "register" for an account.

- Instructions to activate the account for a facility that has previously applied with the ACR for nuclear medicine and/or PET
- Access the online accreditation system
Lead technologist should be account “login”!
ACRedit Database

- Start by reading the Home page
- Read each screen completely before continuing to the next
- Pay ATTENTION to everything in RED
- Extra information by clicking on the icon
Welcome to the American College of Radiology (ACR) online accreditation system. Please read the brief descriptions below to become familiar with the functions on each page of this application. You may access the various pages by clicking on the links below or by clicking on the links at the top of this page. At any time you may log out of the application and finish it later.

In the Application and Testing Package there is a left navigation menu with a list of all forms. A green checkmark means that the form is complete. A red X means that the form is incomplete. You can navigate to each form from the left menu by clicking on the form title.

Please note that you must complete all information on the page and click "Next" prior to logging out or moving to another screen in order for that page to be saved.

**My Applications**

A listing of all draft and submitted applications may be viewed here. Use this page to apply for a new facility, edit draft applications or print a copy of a submitted application.

**My Testing Packages**

A listing of all draft and submitted testing packages may be viewed here. Use this page to complete the testing package for each location for which you have submitted an application. You may also edit draft testing packages or print a copy of a submitted testing package from this page.
CMS Information for MIPPA

Please note, the CMS Information will be saved immediately after clicking the Next button. Providing incorrect information could result in denial of reimbursement.

Effective Jan. 1 2012, all providers that bill the technical component for MRI (including breast MRI), CT, PET and nuclear medicine under part B of the Medicare Physician Fee Schedule must be accredited in order to receive reimbursement from Medicare. The accreditation requirements do not affect hospitals.

The Centers for Medicare and Medicaid Services (CMS) has selected the American College of Radiology (ACR) as a designated accrediting organization for medical imaging facilities, able to satisfy all accreditation requirements for providers of advanced medical imaging mandated by the Medicare Improvements for Patients and Providers Act of 2008 (MIPPA). Under MIPPA, the ACR must share accreditation information with CMS. In order to ensure that your facility continues to receive reimbursement after January 1, 2012, please complete the information below.

EIN:

Please provide the 9-digit tax ID number/EIN for the entity that bills for the technical component under part B of the Medicare Physician Fee Schedule.

________

The Medicare ID (enrollment number) is assigned by CMS. Please note that this is NOT the same as the tax ID/EIN or the NPI.

NPI:

Please provide the National Provider Identifier for the facility which bills the technical component under part B of the Medicare Physician Fee Schedule. Please note that the NPI is a 10-digit number and is NOT the same as the tax ID/EIN.
Transfer of Images and Data
Sites & ACR Benefit

- Shortening turn around times
- Cuts down on lost films
- Cuts cost
  - shipping (ACR/Facility)
  - burning images
Three choices to upload images!

1. Web client – choose images
2. Windows client – choose folders
3. Windows client – connect to your PACS
Web Client

1. Choose images directly through ACRedit
2. No software downloads
3. Can view thumbnail images of what you’ve uploaded
4. Print patient summary
Windows Client - Folders or PACS

1. Small download/install
2. Choose entire folders of images
3. Can view full images using ClearCanvas DICOM viewer
4. See your images just as our reviewers see them
5. Print patient summary
TRIAD™: Transmission of Imaging and Data

- Upload from PACS

For additional information and resources please visit the TRIAD web site:

http://triadhelp.acr.org/Accreditation.aspx

- Wrong format submitted (JPEG vs. DICOM)

TRIAD™ overcomes the challenges of image submission with easy-to-use tools and online services that reduce costs and streamline the process:

- Cuts costs associated with burning and shipping CDs
- Reduces delays in shipping images among facilities, the ACR and reviewers
- Mitigates the risk of losing images
- Ensures compliance with HIPAA regulations throughout the process

Two Ways to Submit Images

TRIAD™ users can electronically submit their images in two ways:
Accreditation FAQ’s

Contact Us
Tech Support is available from Monday to Friday between 8am - 5pm EST.

Contact By Phone:
703.930.9858

Contact By Email:
Triad-Support@acr.org

Accreditation

In the past, facilities submitting images to ACR for accreditation experienced numerous technical challenges using CDs:

- Variation in embedded viewers
- Problems burning images to CDs (sometimes requiring the use of third-party services)
- Translation problems (scanner to PACS)
- Wrong format submitted (JPEG vs. DICOM)

TRIAD™ overcomes the challenges of image submission with easy-to-use tools and online services that reduce costs and streamline the process:

- Cuts costs associated with burning and shipping CDs
- Reduces delays in shipping images among facilities, the ACR and reviewers
- Mitigates the risk of losing images

Two Ways to Submit Images

TRIAD™ users can electronically submit their images in two ways:

ACRedit Web Client

- No software installation required
- Thumbnail views (no full-size images)
- Users can select files only, no folders of images
- Cannot connect with PACS

NEW
Nuclear Medicine Accreditation Modules

- **Planar** - WB and/or spot bone, gallium, Octreotide, I131, hepatobiliary, lung, MUGA, thyroid, breast
- **SPECT** - Bone, liver, hepatic blood pool, brain, gallium, Octreotide, myocardial perfusion
- **Nuclear Cardiology** – Myocardial perfusion & MUGA
  - Parathyroid
  - Gastric Emptying
PET Accreditation Modules

- Oncology* – 2 exams
- Brain – 2 exams
- Cardiac – 2 exams

*Positron Emission Mammography (PEM) under Oncology module

At least one abnormal exam in each module
Selecting Modules

- **Every** unit performing imaging must go through testing for site to be accredited.

- **Every** unit must apply for all modules performed on that unit for site to be accredited.
Selecting Modules

Emergency Use of Units*
(From Program Requirements)

- 5 or more exams from a module within any 30 day period

  Or

- 25 or more exams from a module within any 12 month period

*Some Payers Require All
## Nuclear Medicine & PET Accreditation Fees

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<tr>
<th>Description</th>
<th>Fee</th>
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<tr>
<td>Facility Fee</td>
<td>$1300/modality</td>
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<tr>
<td>Per Module</td>
<td>$700 each</td>
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Each unit can have up to three modules

(Facilities with 3 or more modalities – 10% discount)
Testing Materials

- Testing memo
- Bar-coded labels
- “Important Instructions”
  - New phantom instructions (12/13)
  - Testing forms online
  - Changes (film/CD, exam)
  - Laterality and Orientation labels

*If electronic, no testing package – but will receive email*
Timeline

- Sites have 45 days to complete and submit testing materials
- Extensions considered - case by case
Submission

Instruction Form

☑ Quality Assurance Questionnaire
Unit# 01 SIEC ECAM 03698
☑ Annual Physics Evaluation
☑ Clinical TID (WB Bone)
☑ Clinical TID (Hepatobiliary)
☑ Phantom Site Scanning Data Form

Submit
☐ Upload Files
X Submit

Note
☑ Completed
X Not completed
X Not available
Information

Please Submit the following materials to ACR

NMAP# 50090-01
Clinical image: Hepatobiliary
Clinical image: WB Bone
Phantom Image: Planar Ga-67/In CD#1
Phantom Image: Planar Ga-67/In CD#2
Phantom Image: Planar Tc-99m CD#1
Phantom Image: Planar Tc-99m CD#2
Physician Report (Hepatobiliary) CD#1
Physician Report (Hepatobiliary) CD#2
Physician Report (WB Bone) CD#1
Physician Report (WB Bone) CD#2
Written Procedure (Hepatobiliary)
Written Procedure (WB Bone)

You've successfully entered all required information. Click “Finish” to submit your testing materials to ACR. You will not be able to edit your information once you click “Finish”.

Please read the following instructions before completing and submitting the Testing Package. If instructions are not followed, this could result in accreditation failure.

When submitting your application for this facility location, you indicated that you would submit the following examinations via film or CD:

Unit# 01: Siemens ECAM 03698 2
Clinical Submission Type: CD
Clinical Exams Selected: WB Bone, Hepatobiliary
Phantom Submission Type: CD
Phantom Isotopes Selected: Planar Tc-99m
Planar Ga-67/In
Upload

The following documents are required for your accreditation submission. If you are able to provide them in electronic format, please click the option to attach a document. If you cannot submit electronically, click the mail option. Please write the Modality# and Unit# on the forms. If a label is provided, place the label on the document before mailing it in. Submit all documents with your image submission.

Please note that you MUST submit a printed copy of each physician report and written procedure/protocol (labeled with the provided barcode) with your clinical image submission. If you have chosen CD submission for the clinical exams, please submit a second copy of the documents.

Most Recent NRC/State Inspection Report:
- Mail
- Upload

Unit# 01 Siemens E-CAM 12345
Annual Physics Evaluation:
- Mail
- Upload

Physician Report (Hepatobiliary) CD#1:
- Mail
- Upload

Physician Report (Hepatobiliary) CD#2:
- Mail
- Upload

Physician Report (MPI Cardiology 1) CD#1:
- Mail
- Upload

American College of Radiology
Submission of Materials

Clinical Images

- No volunteers
- Physician’s report
- Written procedure
- Clinical Exam Data Form completed online
- Original films, copies of originals, CDs (JPEG, TIFF), electronic upload (TRIAD)
Clinical Image Evaluation Parameters

- Report Identification
- Film Identification
- Acquisition
- Processing
- Display
- Artifacts
- Radiopharmaceutical (including dose)
NM Accreditation – Common Pitfalls

Clinical Images

- Failure to read instructions
- Incomplete submission of exams
- Not following written procedure
- Information on Clinical Data sheet does not correspond with Physician Report
PET Accreditation – Common Pitfalls

Clinical Images:
- Failure to read instructions
- Submitting only fused images
- Not sending coronal images for oncology, both AC and NAC
- Not submitting Testing Package
#1 Reason for clinical failure...
#1 Reason for clinical failure...
Send Quality Images!
ACR-Approved Deluxe SPECT Phantom
Small Flangeless SPECT Phantom

- D-SPECT
- GE 530c
- GE 570c
- CardiArc
- maiCam
- C!
- P3000
- ClearVision
- Neurologica
- Digirad – some models
ACR-Approved PET Phantom
Phantom Evaluation Parameters

Planar:
- Uniformity
- Spatial Resolution

SPECT and PET:
- Uniformity
- Noise
- Contrast
- Spatial Resolution
NM Accreditation – Common Pitfalls

Phantom Images:

- Incomplete data set
- Failure to submit composite of rods
- Center of rotation
- High-count flood
- Phantom mixing and positioning
PET Accreditation – Common Pitfalls

Phantom Images:

- Incomplete data set
- Failure to include rods
- Failure to remove spheres
- Phantom mixing and positioning
- SUV values now Pass/Fail
Quality Control Testing

- Performance tests are required at least annually
- A physicist report
Quality Control Testing

The PET evaluation must include:

- ACR-approved Phantom
- Dose Calibrators
  - Linearity
  - Accuracy
Additional Items

- Most recent NRC and/or State Inspection
- Response to violations, if any
Achieving Accreditation

• Pass/Fail determined
• All images/unit must pass
• Accreditation granted
• Certificate issued
• Accreditation granted for 3 years
• Final report (with link) issued to Supervising Physician & Administrator
• Technologist notified
American College of Radiology

Nuclear Medicine Services of

Wonderful Nuclear Medicine
4800 HappyTown Boulevard
Anytown, USA 12345

were surveyed by the Committee on Nuclear Medicine Accreditation
of the Commission on Quality and Safety

The following unit was approved

Siemens SYMBIA 2010
For
Nuclear Cardiology

Accredited from:

August 19, 2014 through August 19, 2017

M. Acheson
Chair, Committee on Nuclear Medicine Accreditation

Paul H. Ellertson, M.D.
President, American College of Radiology

NMAP# 000000
Marketing Tools for You:

- Sample Press Release
- Accreditation Seal
- Downloadable seal for stationery, prescription pads, etc
- Web site listing: www.acr.org
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First Deficiency:
• Appeal
• Withdraw module/isotope
• Repeat

Second Deficiency:
• Appeal
• Reinstate – CAP & Retest

Fail Reinstate:
• Accreditation Consultation
• CAP
• Pre-test Images
• Reinstate
Compliance Monitoring After Accreditation Granted

- Validation Site Surveys
- Targeted Film Checks
CMS Requirements

- Verification of personnel qualifications
  - With primary source verification
- Written policy on patient access to information
  - Including patient record retention and retrieval process
- Policies for staff and patient safety
- A policy for consumer complaints
  - Including posted notice about where/how to file a complaint with the provider’s accrediting organization
Notice to Patients

You have the right to submit comments regarding this facility’s radiology imaging and treatment services.

Submit your comments in writing and send to the facility or to the following address:

AMERICAN COLLEGE OF RADIOLOGY
Attn: Accreditation Program Patient Comments
1891 Preston White Dr.
Reston, VA 20191-4326
CMS Requirements

- Unannounced site visits by AO and CMS
- AO must share accreditation information with CMS
- Compliance with federal fraud laws
- No “under review” or “provisional” accreditation
Federal Fraud Laws

- Submission of information to AO subject to federal law
- Submission of false or misleading information
  - Civil penalties, fines
  - Criminal penalties, fines, prison
  - Exclusion from Medicare program
Accreditation Contact Information

- Accreditation hotline:
  - 800-770-0145
  - NM/PET ext. 3707

- Modalities:
  - NM/PET: Carolyn MacFarlane: cmacfarlane@acr.org
  - CT/MRI: Cynthia Davidson: cdavidson@acr.org
  - DMAP: Dina Hernandez: dherndandez@acr.org
  - Breast MRI: Theresa Branham: tbranham@acr.org