The American College of Radiology Accreditation Overview

Dina Hernandez RT(R), QM, CT
Program Specialist CT/MR Accreditation
American College of Radiology

May 5, 2008

Todays Topics:

- **Who is the ACR?**
- **What is ACR accreditation?**
- **CT Accreditation**
- **MRI Accreditation**
- **PET Accreditation**
- **Nuclear Medicine Accreditation**
- **US Accreditation**
- **Breast US Accreditation**

Who is the ACR?

- **Membership organization - 32,000 radiology professionals**
  - **Medical Physicists**
  - **Diagnostic/interventional radiologists**
  - **Nuclear medicine physicians**
  - **Radiation oncologists**

ACR Mission

- **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 for the future of radiology**
    - **Radiation Therapy Oncology Group (RTOG)**
    - **American College of Radiology Imaging Network (ACRIN)**
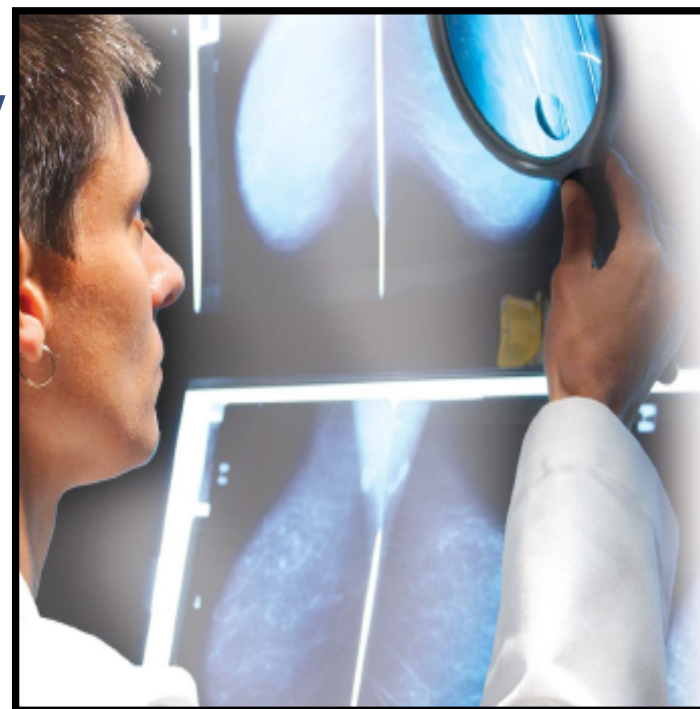
History of Accreditation Programs

- **1987 – Mammography accreditation**

- **1987 – Radiation oncology**

- **1994 – FDA adopts ACR's mammography accreditation program**

- **1995 – Ultrasound accreditation**

- **1996 – Stereotactic breast biopsy accreditation**

- **1997 – MRI accreditation**

- **1998 – Ultrasound guided breast biopsy**

- **1999 – Nuclear medicine accreditation**

- **2002 – CT and PET accreditation**

- **2007 – Cardiac MRI**

ACR Accreditation Programs

New Programs Under Development

- **Cardiac CT accreditation**
- **Modular MRI accreditation- including Cardiac MR**
- **Breast MRI accreditation**

Diagnostic Modality Accreditation Program (DMAP)

- MRI
- CT
- PET
- NM
- Ultrasound
- Breast ultrasound
- Stereotactic breast biopsy
- MR Cardiac

Mammography Accreditation

- **Not part of DMAP**

- **Mammography is mandatory and must follow guidelines established by:**
  - **Mammography Quality Standards Act (MQSA)**
  - **FDA regulations**

Radiation Oncology Accreditation

- **Not part of DMAP**

- **Always includes an on-site survey**

- **Information is collected from actual patient records reviewed on-site**
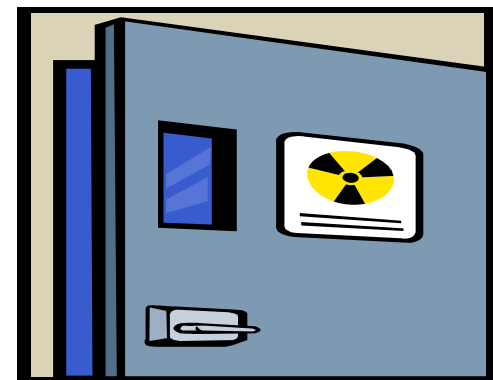
Accreditation Statistics

Modality	Currently Active Facilities	Currently Active Units	Currently Accredited Facilities	Currently Accredited Units
Mammography	8515	13062	8334	12259
MRI	5016	6115	4219	5063
Ultrasound	3074		2690	
CT	3042	3720	1783	2140
Nuclear Medicine	1285	2052	891	1423

Accreditation Statistics

| Modality	Currently Active Facilities	Currently Active Units	Currently Accredited Facilities	Currently Accredited Units
Breast Ultrasound	866		726	
PET	667	703	501	522
Stereotactic Breast Biopsy	527	552	483	500
Radiation Oncology	197	168		
TOTAL	22,775	19,265		

What is ACR Accreditation?

- **A series of accreditation programs whose concepts are reviewed by the ACR council**
  - Peer review process developed and monitored by experts
  - Ongoing review of accreditation by the committee
  - Assesses specific parameters for each imaging modality
  - Pilot tested before being launched
  - Phantom and clinical reviews are performed by experts

What is ACR Accreditation?

- **An educational process with self assessment and peer review**
  - Staff qualifications
  - Policies and procedures
  - Equipment specifications
  - Diagnostic image quality
  - Therapeutic treatment quality

What is ACR Accreditation?
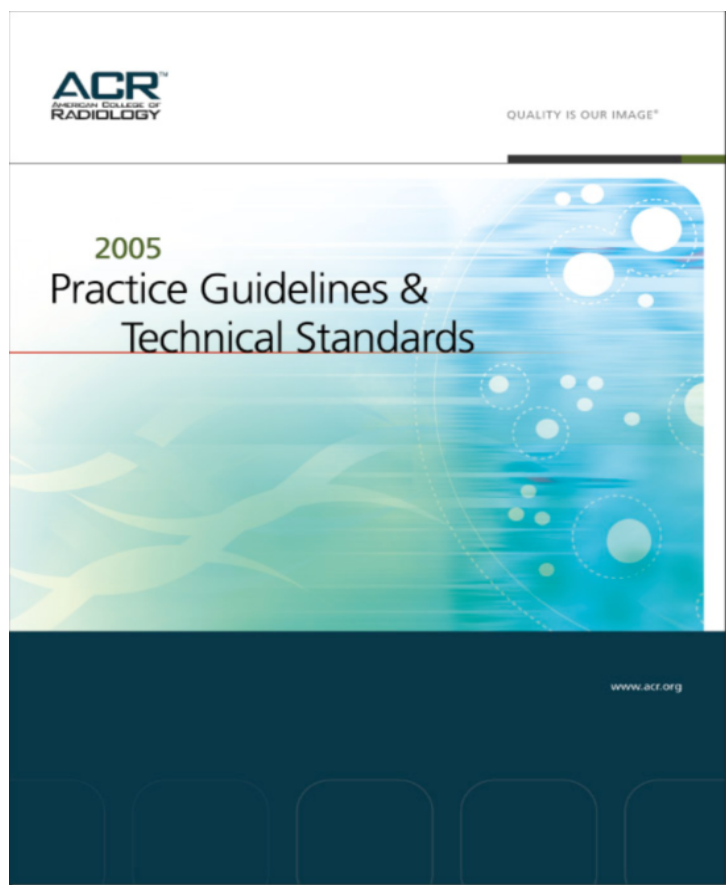
ACR Practice Guidelines and Technical Standards serve as the foundation for the accreditation programs

Your Role in Accreditation

Applying for and achieving ACR accreditation is a team process that involves everyone in the facility

How Do You Apply for Accreditation?

- **Go to the ACR web site at www.acr.org then click on the accreditation link**

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Home | Accreditation

Accreditation

ACR Homepage

Accredited Facility Search

Mammography

Radiation Oncology

Breast Ultrasound

Computed Tomography

Magnetic Resonance Imaging (MRI)

Nuclear Medicine and PET

Stereotactic Breast Biopsy

Ultrasound

Apply for Accreditation

Breast Imaging Center of Excellence

Accreditation Programs

- Why Get Accredited?

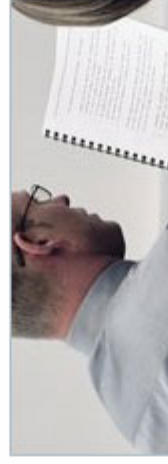- Contact Us

Articles & Announcements

APPLICATION ACCEPTED

- Deadline Extended for UnitedHealthcare Mandatory Accreditation Program

- FDA Mammography Advisory Committee Votes to Include Stereotactic Breast Biopsy under MQSA Regulations

- Breast Imaging Center of Excellence Initiative

- ACR, SBI Leadership to Present at FDA Hearing on Stereotactic Breast Biopsy and MQSA Regulations

- ACR Mammography Accreditation Program Recognized by FDA Report

- ACR Revises Breast Ultrasound Accreditation Program Requirements

- ACR - UnitedHealthcare Accreditation Help Desk

- Mammography Announcements

Products & Services

INTRODUCTION

The Illustrated BI-RADS® Forth Edition is an outgrowth of the Third Edition of the BI-RADS® Lexicon and includes examples of each feature described and a see...

- Appropriateness Criteria - PDA Application

- Breast Imaging Reporting and Data System® (BI-RADS®) Atlas

- Manual on Contrast Media, Version 5.0 (2004)

Media Kit for Accredited Facilities

Use the ACR certification mark and free camera-ready ad to let your patients and the health care community know that your facility meets nationally accepted standards of care.

More....

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Mammography

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Accreditation Programs

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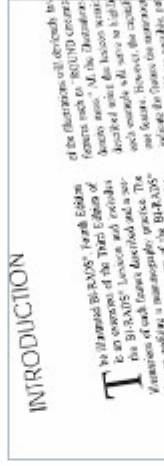- Contact Us

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- Mammography Announcements

Products & Services

INTRODUCTION

The illustrated BI-RADS Fourth Edition is an overview of the Third Edition of the BI-RADS® Lexicon and a summary of each mammographic practice. The importance of each mammographic is a part of the BI-RADS® of the illustrations will develop to BI-RADS concepts, features such as...

- Appropriateness Criteria - PDA Application
- Breast Imaging Reporting and Data System® (BI-RADS®) Atlas
- Manual on Contrast Media, Version 5.0 (2004)

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Home | Accreditation | Apply for Accreditation

Apply for Accreditation

To apply for accreditation please select from the choices below:

- Mammography
- Radiation Oncology
- Diagnostic Modality

- If your facility is applying for Diagnostic Modality Accreditation Program for the first time, please click here.
- If you are an existing DMAP applicant and would like to add a new modality, please click here.
- All other facilities please click here

- Current Facilities
- ACR Online Accreditation Application Now Available

- Online Application Overview and Checklist

Useful Links

ACR Homepage

Current Facilities

ACR Online Accreditation Application Now Available

Online Application Overview and Checklist

Online Application

Advantages of using the online application:

- You can save your work and finish at a later time
- User friendly and guides users through the process
- No more guessing what paperwork is needed
- Automatically calculates the fees and deducts any discounts
- Automatic email notifications

Caveats:

- Only available to sites who are applying for first time accreditation or who are adding a modality
- Not available for renewals or adding new units at this time

The Application

- **Includes information on your**
  - **Practice characteristics**
  - **Practice policies and procedures**
  - **Personnel**
  - **Equipment**
  - **Modality specific information**
  - **Peer review practices**

Accreditation Fees

- **Fees vary with the modality and number of units and/or modules**
- **Facilities applying for three or more modalities per site qualify for a 10% discount**

Missing Items

- The ACR cannot process incomplete applications or provide testing materials until all required information is received.

- Facilities that submit an incomplete application will receive an email, fax or letter requesting the missing information.

Peer Review Update

- **New requirement as of April 1, 2007**
  - Facilities must participate in a physician peer review program to be accredited
  - Several options
    - Your own peer review program
    - RADPEER™
    - Outside Vendor program

Accreditation Updates as of July 1, 2007

- **Mandatory CME appropriate to the physicians/physicist practice:**
  - For CT, MRI, nuclear medicine, PET, and ultrasound accreditation programs
  - 15 CMEs/ 3 years in the modality that he/she reads
  - Half of which must be in category 1

Accreditation Updates as of July 1, 2007

- **Mandatory continuing experience for physicians**
  - CT, MRI, PET, NM and ultrasound must read an average of 9 exams/month over the prior 24-month period
  - Breast Ultrasound and Stereotactic Breast Biopsy have requirements that can be found listed in the modalities program requirements.

CME Update for Accreditation

Sites renewing in July 2007:

- 5 CME (category 1) hours in specific modality in the prior 12-month period.

Sites renewing in July 2008:

- 10 CME (category 1) hours in specific modality in the prior 24-month period

Sites renewing in July 2009:

- 15 CME hours (category 1) in specific modality in the prior 36-month period

Tools Provided for Accreditation

- **QC Manuals (MRI, Mammography, and Stereotactic Breast Biopsy)**

- **Practice Guidelines and Technical Standards (available at www.acr.org)**

- **ACR staff available to answer questions**

- **CD tutorials for Nuclear Medicine and US accreditation**

Testing Materials Phase

- **Testing materials sent when application is accepted**
  - QA questionnaire
  - Instructions for obtaining clinical images
  - Instructions for phantom images, if applicable
  - Labels
  - Data forms
  - Clinical Image Quality Guide- (CT only)

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ACR Homepage

Nuclear Medicine and PET
Accreditation History

Nuclear Medicine & PET
Requirements

Nuclear Medicine & PET
Frequently Asked Questions

Testing and QC Forms

Useful Links

Home | Accreditation | Nuclear Medicine and PET

Nuclear Medicine and PET

Accreditation in nuclear medicine and/or PET is facility based; all units used by a facility must pass the evaluation in order for a facility to be granted accreditation. Facilities will be able to choose from one or more of three modules for each accreditation:

Click to enlarge

Contact Us
For additional information, contact us by:

- **Email:** nmap@acr.org
- **Phone:** (800) 770-0145

Nuclear Medicine Accreditation

    Module 1 – General Nuclear Medicine (planar imaging)
    Module 2 – SPECT (single photon emission computed tomography)
    Module 3 – Nuclear Cardiology Imaging

PET Accreditation

    Module 1 – Oncology
    Module 2 – Brain
    Module 3 – Cardiac

Click here for more information on the history of this program.

Testing Materials Phase

- **Sites will have 45 days to complete the testing materials phase**
- **Extensions are granted on a case by case basis.**

Accreditation Granted

- **Accreditation is granted for a 3-yr period**
- **Each evaluation category for the modality must pass for the site to be accredited**
- **All units at the site must be accredited**
- **Final report is issued to the supervising physician of the modality**
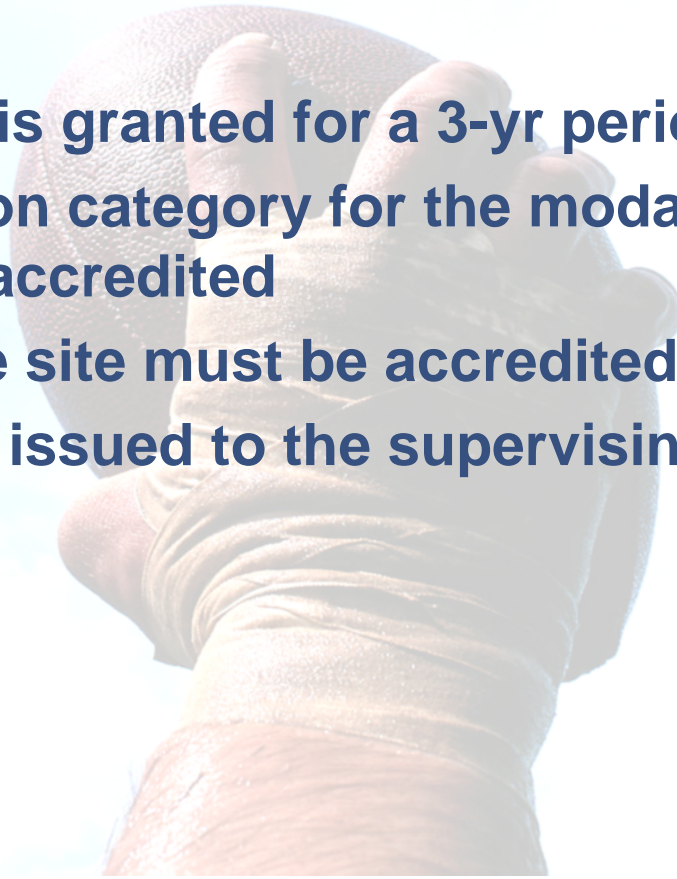
American College of Radiology

The Ultrasound Imaging Services of

Wonderful Ultrasound, Inc.
Anywhere, USA 12345

Were surveyed by the
Committee on Ultrasound Accreditation
of the Commission on Quality and Safety

Accredited for

OB, Gynecological, General & Vascular Ultrasound Services including

* Peripheral Vascular
* Cerebrovascular
* Abdominal Vascular
* Deep Abdominal Vascular

December 1, 2005 through December 1, 2008

CHAIRMAN, COMMITTEE ON ULTRASOUND ACCREDITATION

PRESIDENT, AMERICAN COLLEGE OF RADIOLOGY

UAP # ******

Marketing Tools for You:

✓ **Sample Press Release**

✓ **Accreditation Seal**

✓ **Downloadable seal for stationery, prescription pads, etc**

✓ **Web site listing   www.acr.org**
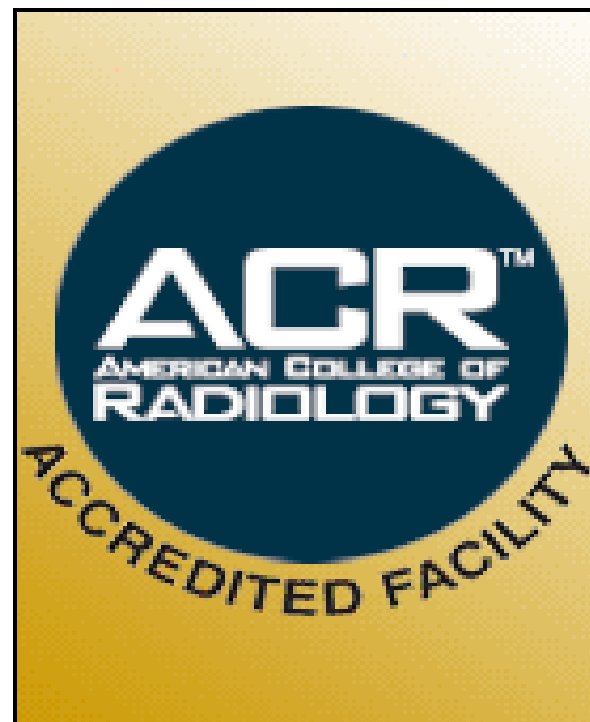
Accredited Facility Search

Look for the ACR accreditation seal! When you see the seal, you know:

- Your hospital, clinic or health center has voluntarily gone through a rigorous review process to be sure it meets nationally accepted standards.

- The personnel are well qualified, through education and certification, to perform and interpret your medical images and administer your radiation therapy treatments.

- The equipment is appropriate for the test or treatment you will receive, and the facility meets or exceeds quality assurance and safety guidelines.

-   Breast Imaging Center of Excellence – Demonstrates excellence in breast imaging by successfully achieving accreditation in Mammography, Stereotactic Breast Biopsy, Breast Ultrasound and Ultrasound-Guided Breast Biopsy.

Diagnostic imaging includes multiple modalities (different types of tests and equipment)–, CT, MRI, mammography, nuclear medicine, PET, breast ultrasound, stereotactic breast biopsy, and ultrasound. The ACR accredits each of these "modalities" separately, so look for accreditation seals for each modality in your hospital's advertisements. Please note that the ACR no longer offers accreditation for general x-ray services.

42 accredited facilities found for search.

Advanced Medical Imaging

2008 West Boulevard
Kokomo, IN 46902
Phone: (765)454-9729
Expires: 01/09/2011

MD IMAGING LAKE AVENUE

2520 LAKE AVENUE
FORT WAYNE, IN 46805
Phone: (260)435-7950
Expires: 03/21/2011

American Health Network of Indiana

MEMORIAL LIGHTHOUSE MEDICAL

What Happens if a Site does not Pass the First Time?

- **Repeat**
  - A site can retest in the area in which they received the deficiency
- **Appeal**
  - Sites have 30 days to appeal the decision
  - The images are reviewed by a senior reviewer and the decision is final
- **Withdraw the unit or module**

If the site does not pass the second time:

- **Reinstate**
  - Site must submit a corrective action plan
  - All testing to be resubmitted
- **Appeal**

Electronic Submission of Images

- **The ACR is currently accepting images in electronic format for:**
    - **Ultrasound (JPEGs okay)**
    - **MRI (uncompressed DICOM)**
    - **CT (clinical images only)**
    - **Nuclear medicine**
    - **PET**
   - **Stereotactic Breast Biopsy**

CT Accreditation Program

CT Accreditation

- **Equipment- meet all state and federal requirements, and applicable ACR Practice Guidelines and Technical Standards**
- **QC – established and implemented under the supervision of medical physicist**
  - **Acceptance testing**
  - **Annual Medical Physicist Survey**
  - **Continuous Quality Control – Frequency determined by Medical Physicist (ACR Computed Tomography Quality Control Manual will be developed in the future)**
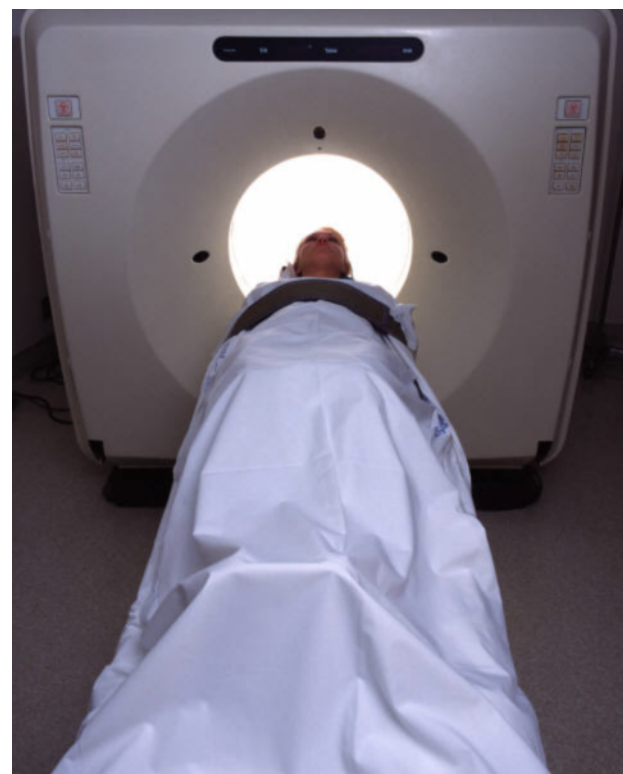
CT Accreditation

- **Type of Scanner**
  - **General**
    - **Head/Neck, Chest and Abdomen exams**
  - **Special**
    - **Head/Neck only**
    - **Chest and Abdomen only**
- **Practice Type**
  - **Adult and Pediatric**
  - **Adult only**
  - **Pediatric only**
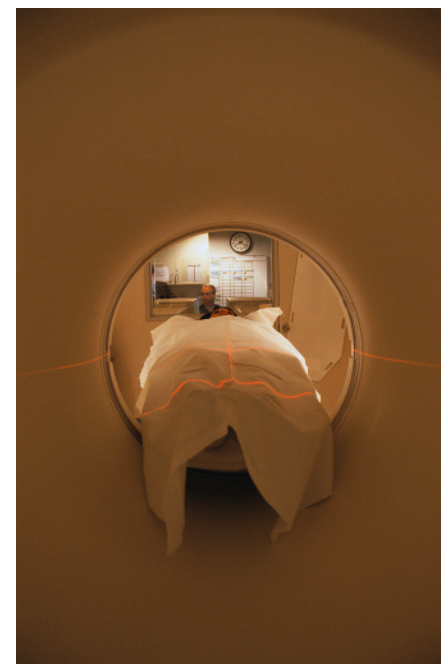
CT Accreditation

- **Clinical exams**
  - Adult and pediatric exams (if applicable)
  - One exam from each category
    - Head/Neck
    - Chest
    - Abdomen
    - Note: No volunteers or models allowed

- **Phantom Images**
  - Must be obtained with the ACR approved phantom
  - Dose testing

CT Accreditation - Clinical Submission

- The facility will choose which examinations it will submit from each category when they apply. These examinations can only be changed by contacting the ACR before materials are submitted for review.

- At least one of the examinations chosen for each scanner must be a specialized examination.

- If the scanner is also used for pediatric patients, one of the examinations must also be from a child between the ages of 0 and 15.
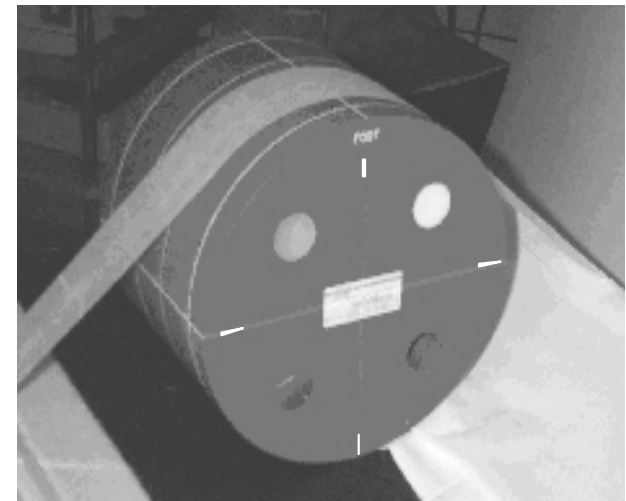
CT Accreditation - Clinical Submission

- **Evaluation parameters**
  - **Technique parameters**
  - **Anatomic coverage and display**
  - **Filming technique (if films are submitted)**
  - **Artifacts**
  - **Exam identification**
  - **Scanning protocol**

CT Accreditation - Phantom Submission

- **Measurements**
  - Slice thickness and positioning
  - CT number accuracy
  - Low-contrast resolution
  - High-contrast (spatial) resolution
  - Image uniformity
  - Artifacts
  - Dose (CTDIvol)

CT Accreditation- Phantom Submission

- **Phantom Submission**
  - CT Phantom Site Scanning Data Form (Table 1)
  - Excel Dose spreadsheets
  - Phantom Images
  - CTDI Images
    - Clinical Test Image Data Sheets provided to phantom reviewers

NOTE:

All parameters should match on all forms and images submitted!

Adult Abdomen : Abdomen CT (such as for detection or possible liver metastases or lymphoma). ¶

Pediatric Abdomen : Pediatric abdomen CT (such as for blunt trauma, acute abdominal pain, or infection). Assume a 5-year-old patient.¶

¶

Using Table 1 , report the typical examination parameters used by your site on this scanner for each of the above CT examinations . ¶

If your scanner does not perform all of these examinations , use the appropriate default protocol given by the manufacturer . ¶

¶

It is the joint responsibility of the supervising radiologist, lead technologist, and physicist to ensure that the values in Table 1 accurately reflect the site's routine clinical protocols and match the respective clinical images submitted for accreditation.¶

¶

Table 1 : Typical Image Acquisition Technical Parameters¶

¶

※	Adult Head¶ (cerebrum portion)#	High Resolution ¶ Chest#	Adult Abdomen#	Pediatric Abdomen← (5 y.o.)#
kVp#	※	※	※	※
mA#	※	※	※	※
Time per rotation (s)#	※	※	※	※
Scan FOV (cm or name)#	¤	※	※	※
Display FOV (cm)#	※	※	※	※
Reconstruction¶ Algorithm#	※	※	※	※
Axial (A) or Helical (H) #	※	※	※	※
Z-axis collimation← or¶ (T, in mm) #	※	※	※	※
# data channels used [1] (N)#	※	※	※	※
A: Table Increment (mm) or¶ H: Table Speed (mm/rot)¶ (I) #	※	※	※	※
Pitch²#	※	※	※	※
Reconstructed Scan Width (mm)#	※	※	※	※
Reconstructed Scan Interval (mm)#	※	※	※	※

CT Accreditation - Phantom Submission

- **Examination parameters used for phantom submission**
  - **Adult Head- Cerebrum portion**
  - **Adult HRCT**
  - **Adult Abdomen**
  - **Pediatric Abdomen (assume 40 lb patient size)**
- **Use average (typical) techniques, not automatic dose reduction options**
- **The phantom protocols may not necessarily match the submitted clinical protocols**

CT Accreditation - Phantom Submission

- **ACR phantom performed by technologist or physicist**
  - **If performed by technologist, physicist should check all images and paperwork**

- **CTDI portion (dose testing) must be performed by physicist**

NOTE: Accreditation is a team process! The physicist and technologist must work together to ensure accurate and acceptable results.

CT Accreditation – Dose Testing

- Reference values
- Pass/fail limits (Effective January 1, 2008)

Examination	Pass/Fail Criteria CTDI$_{vol}$ (mGy)	Reference Levels CTDI$_{vol}$ (mGy)
Adult Head	80	75
Adult Abdomen	30	25
Pediatric Abdomen (40 lb)	25	20

CT Accreditation – Common Pitfalls

- **Clinical Images**
  - Submitting the renal mass study without a renal mass visible
  - Not submitting region of interests (ROIs) pre and post on the renal mass exam
  - Scanning through the orbits/lens on a brain CT
  - Not submitting the required filmed images (i.e. bone, lung or soft tissue windows)
  - Not looking at the *Clinical Image Quality Guide* before choosing the clinical exams (available at www.acr.org)
  - Sites selecting examinations that they do not usually perform
  - Supervising physician not reviewing the images before they are sent to the ACR

CT Accreditation – Common Pitfalls

- **Phantom images**
  - All parameter information is not consistent on all forms and images
  - The parameters given to the physicist are not the parameters actually used for clinical examinations
  - Not listing all available kVp stations and slice thickness options
  - Not using the Excel dose spreadsheets from the ACR website
  - Not including a SMPTE pattern or equivalent as first image on each film
  - Not checking images for correct annotation
  - Not checking the images for correct protocol

CT Accreditation – Common Pitfalls

- **Dose Images**
  - Not filling the unused holes in the CTDI phantom
  - Not using axial images
  - Not scanning the adult head in the head holder
  - Not scanning the abdomen images on table top
  - When changing from helical to axial, make sure the total beam width is as close as possible to the clinical parameters

Note: If the site applied for adult only accreditation, a pediatric protocol and dose measurement is not necessary

CT Accreditation Fees

- **$2400 for the first unit**
- **$2300 for each additional unit at the same address**

- **MRI Accreditation Program**

MRI Accreditation

- **Clinical exams**
  - Brain
  - C-spine
  - L-spine
  - Knee
  - Note: No volunteer or models are allowed

- **Phantom Submission**
  - Phantom images using the ACR approved phantom
 - QC forms
  - Physicist report

MRI Accreditation – Clinical Submission

- **Evaluation parameters**
  - Pulse sequences and image contrast
  - Filming technique
  - Anatomic coverage and imaging planes
  - Spatial/Temporal resolution
  - Artifacts
  - Examination ID

MRI Accreditation – Phantom Submission

- **Measurements**
  - Limiting high-contrast spatial resolution
  - Slice thickness accuracy
  - Distance measurement and accuracy
  - Signal uniformity
  - Image ghosting ratio
  - Low-contrast detectability
  - Slice positioning accuracy
  - Image artifacts
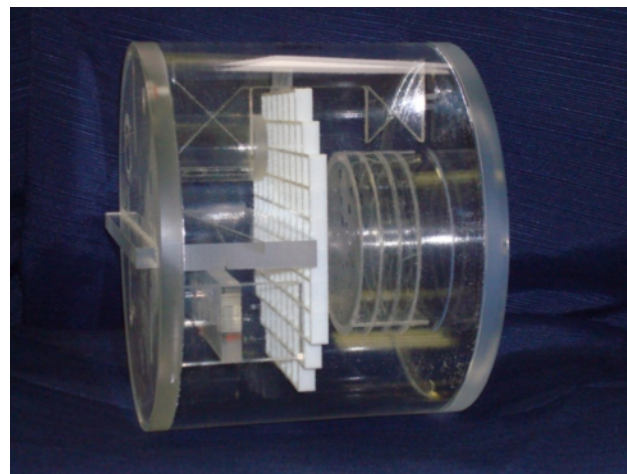
MRI Accreditation – QC Testing

- **All sites initially applying for and renewing MUST submit:**

  - A copy of the facility's most recent Annual MRI System Performance Evaluation (must be dated within 1 year of the date of ACR MRI submission for accreditation)

  - Copies of the facility's weekly on-site QC data (forms on pages 64, 65, and 66 of the *2004 ACR MRI Quality Control Manual*)

MRI Accreditation – Common Pitfalls

- **Clinical Images**
  - Not sending scouts with the reference lines to identify the axial images for cervical and lumbar spines
  - Not checking the CDs to make sure the sequences/exams are on the disk
  - Not checking the CDs or films to see if all the annotations are visible on the images
  - Forgetting to send the required sequences
  - Not sending DICOM images
  - Not including the viewer on the clinical CD
  - The viewer does not meet the ACR's minimum requirements
  - Improper filming

MRI Accreditation – Common Pitfalls

- **Phantom Images**
  - Including a viewer with the phantom CD (DICOM phantom images should be burned to the CD without an embedded viewer)
  - Not sending uncompressed DICOM images
  - Not submitting all of the required phantom sequences
  - Submitting corrupt CDs

MRI Accreditation Fees

- **$2400 for the first unit**
- **$2300 for each additional unit at the same address**

- **Nuclear Medicine/PET Accreditation Program**
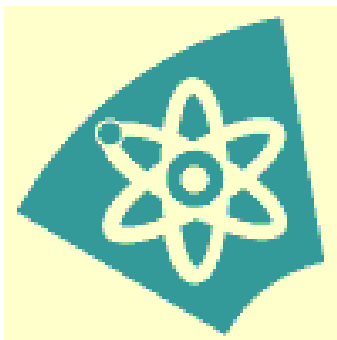
Nuclear Medicine Accreditation

- **Clinical exams – a facility must apply for each module that's performed on each unit**
  - **Planar-** WB and/or spot bone, hepatobiliary, lung, MUGA
  - **SPECT** - Bone, liver, hepatic blood pool, brain, myocardial perfusion

  - **Nuclear Cardiology** – Myocardial perfusion, gated SPECT

    MUGA
- **Phantom submission-**
  - Phantom images
  - QC Forms
  - Annual Physicist Report
  - NRC or state inspection

PET Accreditation

- **Clinical exams – a facility must apply for each module that's performed on each unit**
  - Oncology – 2 exams, one must be abnormal
  - Brain – 2 exams, one must be abnormal
  - Cardiology – 2 exams, one must be abnormal

- **Phantom submission**
  - Phantom images
  - QC forms
  - Physicist report
  - NRC/State inspection report

Nuclear Medicine/PET Accreditation – Clinical Submission

- **No volunteers or models**
- **Physician's report for each exam**
- **Written procedure**
- **Clinical Test Image Data Sheet**
- **Original films, copies of originals or CDs**
- **Example of best work**

Nuclear Medicine/PET Accreditation

- **Clinical Image Evaluation Parameters**

  – **Report Identification**

  – **Film Identification**

  – **Acquisition**

  – **Processing**

  – **Display**

  – **Artifacts**

  – **Radiopharmaceutical distribution**

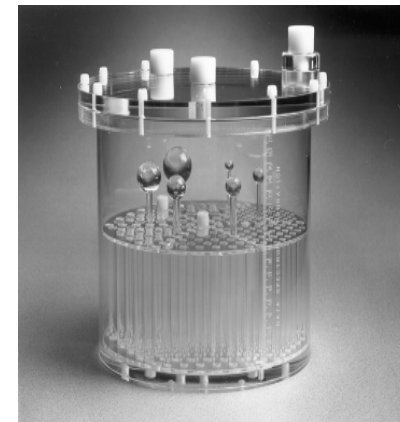# Nuclear Medicine/PET Accreditation- Common Pitfalls

- **Clinical Images**

    - **Incomplete submission of exams**

    - **Failure to read instructions**

    - **Incomplete clinical test image data sheets**

    - **Not following written procedure**

    - **Failure to label orientation and laterality**

Nuclear Medicine/PET- Phantom Image Evaluation Parameters

Planar
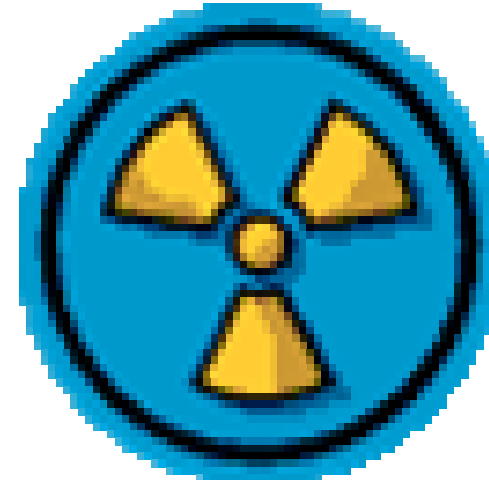
- **Uniformity**
- **Spatial Resolution**

SPECT and PET Phantom Images

- **Uniformity**
- **Noise**
- **Contrast**
- **Spatial Resolution**

Nuclear Medicine/PET Accreditation – Phantom Submission

- **Phantom images**
- **Site Scanning Data sheets**
- **Physicist Report**
- **Quality assurance questionnaire**
- **NRC and/or state inspection**

Nuclear Medicine/PET Accreditation-Common Phantom Pitfalls

Nuclear Medicine
- Incomplete submission of images
- Center of Rotation
- High count flood
- Phantom mixing
- Phantom positioning

PET
- Incomplete submission of images
- Phantom mixing
- Phantom positioning
- Failure to remove spheres
- Failure to keep rods in phantom

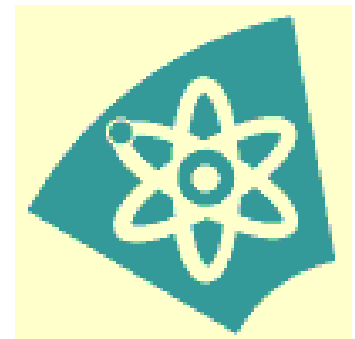# Nuclear Medicine - Quality Control Testing

The Annual Physicist report must include the following items for each camera:

- Uniformity (intrinsic & system)

- Spatial Resolution

- Sensitivity

- Energy Resolution

- Count Rate Parameters

Nuclear Medicine - Quality Assurance Program & Equipment Quality Control

The site should have a QA program that incorporates the following two elements:

- Appropriateness/outcome analysis
- Nuclear medicine and/or PET equipment QC

PET Accreditation - Quality Control Testing

- **The PET QC evaluation should be consistent with the ACR Standard for Medical Nuclear Physics: Performance Monitoring of PET Imaging Equipment**

Nuclear Medicine/Pet Accreditation

Facility Fee $1200/modality

Per Module $600 each

Each unit can have up to three modules

Ultrasound Accreditation Program

US Accreditation

Modules

- **Obstetrical (includes trimester-specific)**
- **Gynecological**
- **General**
- **Vascular**
  - Peripheral
  - Cerebrovascular
 - Abdominal
  - Deep Abdominal

US Accreditation

Clinical Images:

- **Obstetrical, Gynecological and General Modules**
  - **Four exams of each type**
  - **Normal exams requested**
- Vascular Module
  - **One normal and one abnormal of each type**

US Accreditation

- **Quality Control**
  - Must be in place for each ultrasound unit in the facility
  - Must include documentation describing the goals and responsibilities of the QC program
  - Must be directed by a medical physicist or supervising radiologist/physician
  - Quality control testing must occur regularly
  - A minimum requirement of testing is *semiannually*
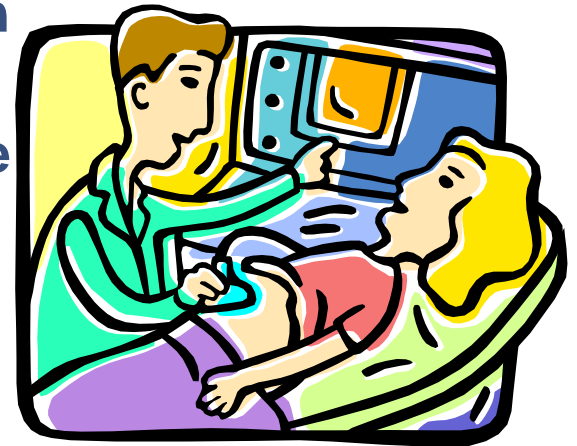
US Accreditation

- **US QC program must evaluate at least the following items in gray-scale imaging mode**:
    - System sensitivity and/or penetration capability
    - Image uniformity
    - Photography and other hard-copy recording
    - Assurance of electrical and mechanical safety
    - Low-contrast object detectability (optional)

US Accreditation Fees

First Module	$1000
Combination of 2 Modules	$1100
Combination of 3 Modules	$1200
All 4 modules	$1300

Breast Ultrasound Accreditation

Breast Ultrasound

Required Examinations

Breast Ultrasound Module

- **Simple Cyst and Solid Mass**

Ultrasound-Guided Biopsy Module

- **Core needle biopsy and/or fine needle aspiration cytology**

Breast Ultrasound

- **Semiannual QC**
  - **Maximum depth of visualization and hard copy recording with a tissue-mimicking phantom**
  - **Vertical and horizontal distance accuracy**
  - **Uniformity**
  - **Electrical-mechanical cleanliness condition**
  - **Anechoic void perception**
  - **Ring down**
  - **Lateral Resolution**
  - **Quality Control Checklist**

Breast Ultrasound

- **Quarterly**
  - **Distance calibration**
  - **Grey – scale photography**
- **After each biopsy**
  - **Adherence to universal infection control procedures**
- **After each patient**
  - **Clean transducers**

Quality Control

The following routine QC is recommended for all ultrasound units used for breast imaging[1,2]:

Recommended Quality Control for Breast Ultrasound		
Test	Frequency	Performed By
Maximum depth of visualization and hardcopy recording with a tissue-mimicking phantom	Semiannually	Service engineer/medical physicist
Vertical and horizontal distance accuracy	Semiannually	Service engineer/medical physicist
Uniformity	Semiannually	Service engineer/medical physicist
Electrical-mechanical cleanliness condition	Semiannually	Service engineer/medical physicist
Anechoic void perception	Semiannually	Service engineer/medical physicist
Ring down	Semiannually	Service engineer/medical physicist
Lateral resolution	Semiannually	Service engineer/medical physicist
Quality control checklist	Semiannually	Service engineer/medical physicist
Adherence to universal infection control procedures	After each biopsy	Technologist
Clean transducers	After each patient	Technologist
Vertical and horizontal distance accuracy	Quarterly	Technologist
Grey-scale photography	Quarterly	Technologist

As part of accreditation, facilities must submit a copy of the service engineer's most recent preventive maintenance report or the medical physicist's most recent equipment survey. Although the ACR will not initially use this information to determine whether a facility passes or fails accreditation, it may be used in the future to set criteria.

Breast Ultrasound Fees

Breast Ultrasound Fee	**$1000**
Breast Ultrasound with biopsy	**$1200**

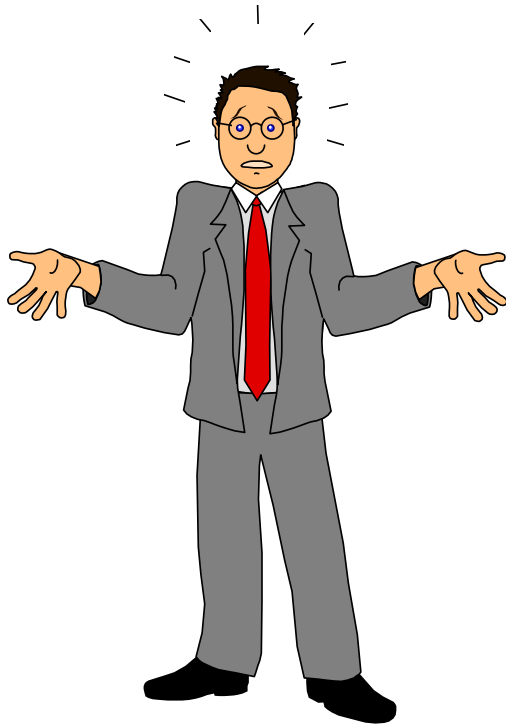# Why Seek ACR Accreditation?

1 Reason is QUALITY

Plus:

- Peer-reviewed, educationally focused evaluation of practice

- May document need for new or dedicated equipment, continuing education or qualified personnel

Why Seek ACR Accreditation?

Plus:

- Patient Confidence
- Payer Confidence
- Expert assessment of image quality
- Formal review may be used to meet criteria of state or federal government, or third party payers
- Marketing tool – set your practice apart

The Future of ACR Accreditation

- **Reviews online**

- **Images uploaded – not mailed**

- **Compliance audits for all sites**

- **QC Manuals for CT, Nuclear Medicine, PET**

THANK YOU

AMERICAN COLLEGE OF RADIOLOGY
1891 Preston White Drive
Reston, VA 20191-4397
Phone: DMAP Accreditation Hotline (800) 770-0145
Breast Imaging Accreditation (800) 227-6440

www.acr.org

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