



## ACR Ultrasound Accreditation: Requirements and Pitfalls

Presented to:  
American Association of Physicists  
in Medicine

Presented by:  
Jennifer Walter RDMS,RVT, RT(R)  
ACR Quality & Safety  
August 03, 2016

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## Disclosures

# NONE



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## Accreditation Update



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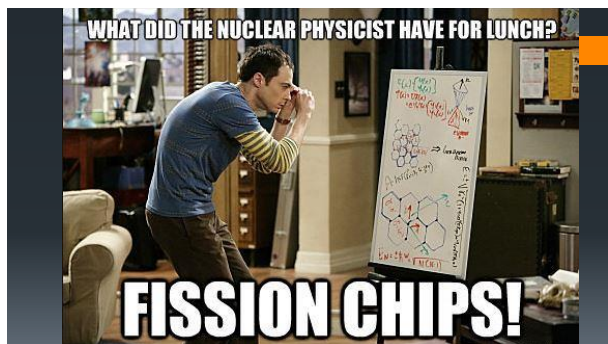
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## Objectives



By the end of this presentation:

- Understand the impact accreditation may have on your practice
- Be aware of requirements and updates to the ACR Ultrasound Accreditation program
- Be able to apply for and successfully achieve ACR ultrasound accreditation




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## WHO ARE WE?

The American College of Radiology, founded in 1924, is a nonprofit professional medical society dedicated to serving patients and society by empowering radiology professionals to advance the practice, science and professions of radiological care.

### Core Purpose of the ACR:

To serve patients and society by empowering members to advance the practice, science and professions of radiological care.

### ACR Core Values

Leadership Integrity Quality Innovation




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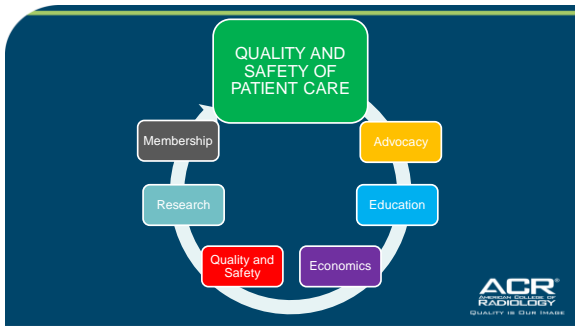
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**Advocacy** The ACR advocates on behalf of the radiology profession and ACR membership with Congress, federal agencies and state legislative and regulatory bodies.

- **Education** ACR offers a comprehensive array of educational options to best meet your learning needs -- no matter what field of radiology you specialize in.
- **Economics** ACR Economics and Health Policy focuses on issues related to how radiologists and radiation oncologists are reimbursed for their services under the guidance of the Commission on Economics.
- **Quality & Safety** Improving the quality and safety of patient care is a core element of the ACR mission. The College takes a proactive and aggressive approach on key issues impacting radiology.
- **Clinical Research** The ACR produces scientific and health policy research to advance the practice of medical imaging and radiation oncology.
- **Membership** ACR membership offers exclusive services, benefits, and opportunities. Whether you're looking to advance your career, further your education, or sharpen your clinical skills, the ACR is your one-stop resource.

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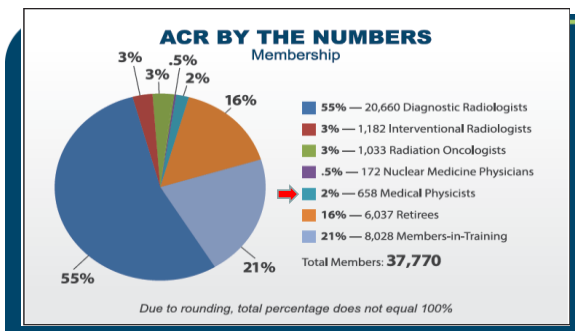
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## ACR Quality & Safety

- Over 38,000 **accredited** medical imaging facilities
- Radiology lexicons
  - ACR BI-RADS®
  - Lung-RADS™
- Practice Parameters and Technical Standards
- ACR Appropriateness Criteria®
- RADPEER™
- Founding member of Image Wisely® & Image Gently®
- Choosing Wisely® participant
- ACR Designated Lung Cancer Screening Center™
- Pay-for-Performance resources
- National Radiology Data Registry
- Lung Cancer Screening Registry
- Dose Index Registry®
- ACR Manual on Contrast Media




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## What is ACR Accreditation?

- Peer review process developed and monitored by experts
- Concept must be approved by the ACR Council
- Assesses specific parameters for each imaging modality
- Based on ACR Practice Parameters and Technical Standards
- Ongoing review of accreditation program by the committee
- Pilot tested before being launched




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## ACR Accreditation

- Staff qualifications
- Policies and procedures
- Protocols
- Equipment specifications
- Diagnostic image quality
- Therapeutic treatment quality




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## 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



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## ACR Nationally Recognized Accreditation Programs:



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The ACR offers accreditation programs as mandated under the Medicare Improvements for Patients and Providers Act (MIPPA):

- CT
- Nuclear Medicine and PET
- MRI
- Breast MRI

The ACR offers accreditation for modalities mandated under the Mammography Quality Standards Act (MQSA):

- Mammography

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## ACR's Accreditation History

Since 1987, the ACR has accredited more than 38,000 facilities in 10 different imaging modalities.

- 1986 – Radiation Oncology
- 1987 – Mammography Accreditation
- 1992 – FDA adopts ACR's mammography accreditation program
- **1995 – Ultrasound**
- 1996 – Stereotactic Breast Biopsy
- 1996 – MRI
- 1998 – Breast Ultrasound
- 1999 – Nuclear Medicine
- 2002 – CT, radiography/fluoroscopy, and PET
- 2010 – CMS accepts ACR as accrediting organization for MIPPA  
Breast MRI program launched




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MODALITY	ACCREDITED FACILITIES
MAMMOGRAPHY	8274
MRI	7130
CT	6911
ULTRASOUND	4970
Nuclear Medicine	3566
Breast Ultrasound	2201
PET	1560
Stereotactic Breast Biopsy	1451
Breast MRI	1482
Radiation Oncology	665
Total	38,210

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## Diagnostic Imaging Center of Excellence (DICOE)

- Provides a comprehensive assessment of the entire medical imaging enterprise 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



The shape of medical imaging excellence today.  
Instantly announce that your medical imaging team delivers outstanding outcomes in a wide array of procedures, performance areas and quality control measures.

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**DICOE Eligibility:**

- ACR accreditation in all modalities provided for which ACR offers accreditation
- Participates in Dose Index Registry® and General Radiology Improvement Database
- Has pledged to Image Gently® and Image Wisely®
- Site survey assessing multiple areas of quality, safety, procedures and personnel by an ACR survey team that includes a radiologist, medical physicist and technologist working with your team members

**Areas of Assessment:**

- Governance
- Personnel
- Facility organization and management
- Physical environment
- Equipment and IT infrastructure
- Radiation and general safety
- Quality management
- Policies and procedures
- Patient rights
- Medical records



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**First International DICOE**

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**Why Seek ACR accreditation?**

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

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- Self assessment of practice quality
- Marketing tool – set a practice apart from the rest
- Patient confidence
- Better informed patients are seeking high quality care
- ✓ ---72% of Internet users say they looked online for health information \*
- ✓ ---68% say the information they found influenced their medical decisions

\*<http://www.pewinternet.org/fact-sheets/health-fact-sheet>




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Patients can look for accredited facilities on the ACR website




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#### Accredited Facility Search

Use the search form below to find imaging facilities accredited by the American College of Radiology. Facilities. To verify the accreditation status of specific units within your imaging facility, please call 1.800.770.0146.

Find by: ZIP/Zip: Washington, District of Columbia, DC Within: 10 Miles  
Modality: Ultrasound Designation: - Select - Search

Download a list of all ACR-accredited facilities

This list covers all modalities and includes facilities whose applications for accreditation are still under review. It provides patients, providers and third-party payers with information critical to selecting appropriate facilities for imaging needs. It is not intended as nor should this list be used for marketing or research purposes.



19 Accredited facilities 9 Facilities in process  
1) GW Imaging Center 2027 K Street NW Suite 100 Washington, DC 20037




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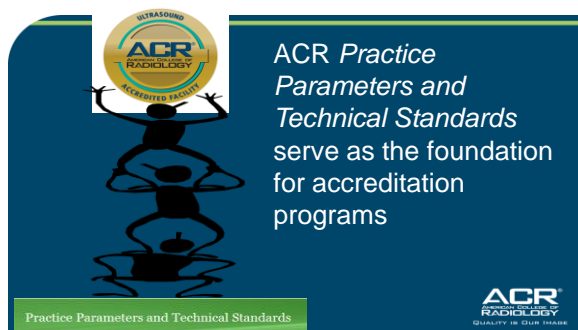
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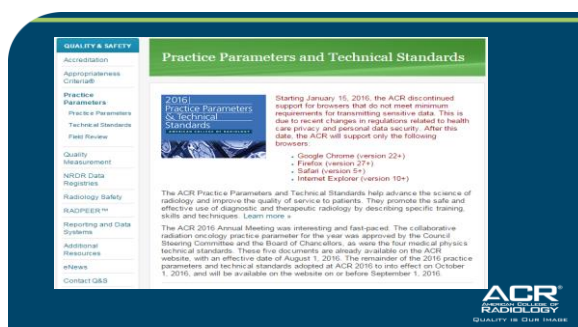
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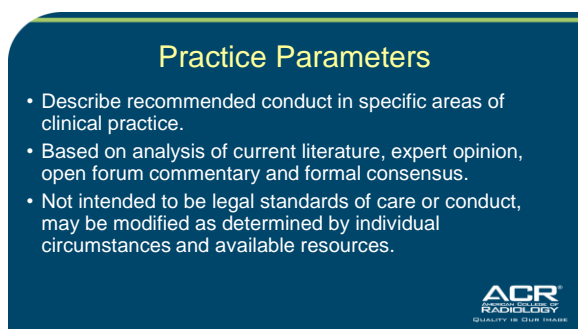
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The Practice Parameters have been organized under the headings below. Some documents may be included under multiple headings:

- Documentation and Reporting Practice Parameters
- Practice Parameters by Modality
  - General Diagnostic Radiology
  - Radiography
  - Computed Tomography (CT)
  - Magnetic Resonance Imaging (MRI)
  - Nuclear Medicine
  - Ultrasound
- Practice Parameters by Organ or Body System
  - Abdomen – Gastrointestinal
  - Abdomen – Genitourinary
  - Breast Imaging and Intervention
  - Cardiovascular
  - Chest
  - Musculoskeletal
  - Neurology
- Practice Parameters by Radiology Subspecialty
  - Interventional Radiology
  - Pediatric
  - Radiation Oncology
  - Medical Physics




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## Practice Parameters

Internet Explorer 8 users: If you have difficulty opening the documents below, please try one of the following:

1. Click the Refresh button in your browser to load the document completely.
2. Right-click on the document link and select Save Target As... to save the file to your local drive and open it from there.

### Diagnostic Radiology: Nuclear Medicine Practice Parameters and Technical Standards

ACR Practice Parameter for the Performance of Single Photon Emission CT (SPECT) Brain Perfusion and Brain Death Studies Res. 21 – 2007

[View all](#)

### Diagnostic Radiology: Ultrasonography Practice Parameters and Technical Standards

ACR-SPRM-SRU Practice Parameter for Performing and Interpreting Diagnostic Ultrasound Examinations Res. 7 – 2011

ACR-ASUM Practice Parameter for the Performance of an Ultrasound Examination of the Abdomen and/or Retroperitoneum Res. 24 – 2007

[View all](#)




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## Technical Standards

- Describe technical procedures or practices that are quantitative or measurable.
- Often include specific recommendations for patient management, equipment specifications or settings.
- Based on analysis of current literature, expert opinion, open forum commentary and formal consensus.
- Intended to set a minimum level of acceptable technical proficiencies and equipment performance, may be modified as determined by individual circumstances and available resources.
  - Medical Physics
  - Nuclear Medicine




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**QUALITY & SAFETY**

- Accreditation
- Appropriateness Criteria®
- Practice Parameters
- Technical Standards
- Field Review

**Quality Measurement**

- NRDR Data Registries
- Radiology Safety
- RADPEER™
- Reporting and Data Systems
- Additional Resources
- News

## Technical Standards

**Internet Explorer 8 users:** If you have difficulty opening the documents below, please try one of the following:

1. Click the Refresh button in your browser to load the document completely.
2. Right-click on the document link and select **Save Target As...** to save the file to your local drive and open it from there.

**Medical Physics**

- ACR Technical Standard for Diagnostic Medical Physics Performance Monitoring of Computed Tomography (CT) Equipment Res. 14 – 2007
- ACR Technical Standard for Electronic Practice of Medical Imaging Res. 13 – 2007
- [View all](#)

**Nuclear Medicine**

- ACR Clinical Technical Standard for Diagnostic Procedures Using Radiopharmaceuticals Res. 5 – 2011

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## Medical Physics

- ACR–AAPM–SOM Technical Standard for Electronic Practice of Medical Imaging Res. 35 – 2012
- ACR–AAPM Technical Standard for the Performance of Proton Beam Radiation Therapy Res. 46 – 2013
- ACR–AAPM Technical Standard for the Performance of Radiation Oncology Physics for External Beam Therapy Res. 52 – 2015
- ACR–AAPM Technical Standard for Medical Physics Performance Monitoring of Image-Guided Radiation Therapy (IGRT) Res. 36 – 2014
- ACR–AAPM Technical Standard for the Performance of Low-Dose-Rate Brachytherapy Physics Res. 51 – 2015
- ACR–AAPM Technical Standard for the Performance of High-Dose-Rate Brachytherapy Physics Res. 50 – 2015
- ACR–AAPM Technical Standard for Diagnostic Medical Physics Performance Monitoring of Radiographic Equipment CSQ-BOC 2016
- ACR–AAPM Technical Standard for Diagnostic Medical Physics Performance Monitoring of Fluoroscopic Equipment CSQ-BOC 2016
- ACR–AAPM Technical Standard for Diagnostic Medical Physics Performance Monitoring of Computed Tomography (CT) Equipment Res. 14 – 2007
- ACR–AAPM Technical Standard for Diagnostic Medical Physics Performance Monitoring of Magnetic Resonance Imaging (MRI) Equipment Res. 14 – 2014
- ACR Technical Standard for Diagnostic Medical Physics Performance Monitoring of Real Time Ultrasound Equipment Res. 3 – 2011

**The ACR–AAPM Technical Standard for Diagnostic Medical Physics Performance Monitoring of Real Time Ultrasound Equipment was adopted May 2016.**

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## 2017 Draft ACR Practice Parameters and Technical Standards

**Field Review**

Members may make comments on items in the Practice Parameters or Technical Standards and suggest changes

Field Review Cycle	Review Period
First Field Review Cycle	August 8 – 26, 2016
Second Field Review Cycle	August 29 – September 10, 2016
Third Field Review Cycle	September 19 – October 7, 2016
Fourth Field Review Cycle	October 10 – 28, 2016

Any comments made after the field review concludes can only be proposed on the ACR Council floor at the 2017 annual meeting. **Any substantive changes presented at the annual meeting can sideline the document approval process and delay implementation for an entire year.**

[Review and comment here »](#)

**A Brief Description of the Field Review Process**

Draft ACR Practice Parameters and Technical Standards are grouped into one of four field review cycles, each field review lasts three weeks.

The parameters and standards are posted on the ACR website. ACR members are invited by email to review and comment on them. Reminders are emailed before each cycle to all members on appropriate committees and commissions.

At the end of each field review cycle, the comments are submitted to each appropriate CSC subcommittee chair who meets by conference call with volunteer members to discuss the comments and review the draft parameters and/or standards as needed. Any applicable collaborating society also reviews and approves them before ACR finalizes them at the annual meeting.

Your feedback on the 2017 practice parameters and technical standards not only helps improve radiology, but supports the ACR core values of excellence, integrity, quality and innovation.

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**2017 Draft ACR Practice Parameters and Technical Standards**

The field review process provides time for all ACR members to offer thoughtful comments about the Practice Parameters and Technical Standards.

The field review process will begin in August 2015 for Practice Parameters and Technical Standards that will be presented at the ACR 2016 Annual Meeting in Washington, DC.

**Practice Parameters and Technical Standards Resources**

- Current Practice Parameters and Technical Standards
- Sunset Practice Parameters and Technical Standards
- Practice Parameters and Technical Standards Development Handbook
- Proposal Form for New Practice Parameters or Technical Standards
- Practice Parameters Committee Structure
- Position Statement on QC and Improvement, Safety, Infection, Control and Patient Education

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**The Technical Standards Being revised for 2017:**

- ACR–AAPM Technical Standard for Diagnostic Medical Physics Performance Monitoring of Computed Tomography (CT) Equipment
- ACR–AAPM–SIIM Technical Standard for Electronic Practice of Medical Imaging



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**Membership** *Become a member today!*

Become a member of the ACR and take advantage of the wide array of resources available to you. ACR membership offers exclusive services, benefits, and opportunities. Whether you're looking to advance your career, further your education, or sharpen your clinical skills, the ACR is your one-stop resource.



**Membership Services**

ACR membership provides information for current ACR members, returning ACR members and people interested in becoming a member. The membership section contains important information about state chapters, exclusive member benefits and opportunities.

**U.S. and Canadian\* Medical Physicist Members**

• First year out of training	\$125
• Second year out of training	\$140
• Third year out of training	\$190
• Full medical physicist member	\$240

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## Preparing for ACR Accreditation

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



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## Accreditation Process

- Site applies for accreditation online
- ACR staff processes application and sends Testing Materials
- Site is allowed 45 days to submit testing items
- Once all Testing Materials received, items are sent for review
- Clinical images are reviewed by 2 Radiologists
- Submitted QC is reviewed by ACR staff
- ★ Our streamlined application process has cut approval time in half, with accreditation evaluation typically completed within 30 - 60 days of image submission. Electronic submissions process the quickest.

**\*\* Ultrasound is location based, not unit based**

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## Dedicated Accreditation Webpage



<http://www.acraccreditation.org/>

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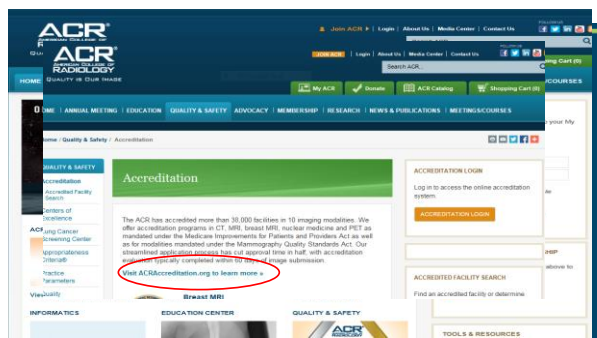
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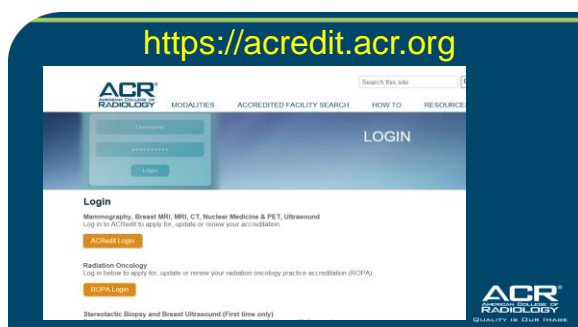
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Version: 1.7.3

**ATTENTION: YOUR INTERNET BROWSER MAY BE OUT OF DATE!**  
As a result of recent changes in regulations related to health care privacy and personal data security, ACR will discontinue support for browsers that do not meet minimum requirements for transmitting sensitive data as of January 15, 2016. After this date, only the following browsers will be supported:

- Google Chrome (version 22+)
- Firefox (version 27+)
- Safari (version 5+)
- Internet Explorer (version 10+)

Safeguarding your data is of the utmost importance to us, and we appreciate your help in ensuring safe and secure computing.

ACR Accreditation

ACRedit

E-mail Address:

Password:

☐ Remember me next time

Login

Register

[Forgot Password?](#)

**Lead technologist should be account "login"!**

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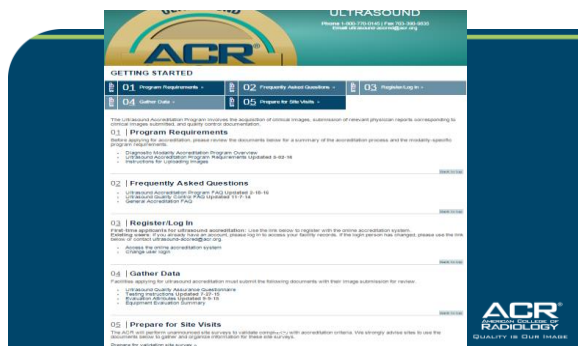
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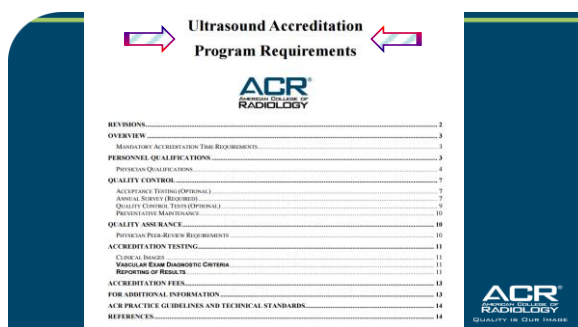
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## Sonographer Requirements

### Initial:

Registered or registry eligible\* -

- American Registry of Diagnostic Medical Sonographers (ARDMS)
- American Registry of Radiologic Technologists, Sonography (ARRT) (S)

\*All sonographers should obtain certification within 24 months of eligibility. Breast (BR) credential earned prior to June 30, 2010 will be accepted.

### Renewal:

All sonographers must be certified and currently registered as RDMS (OB or AB), RT(S), RT (VS), RVT, or RVS.

### Initial and Renewal Vascular Accreditation Sites

- RVT (Registered Vascular Technologist) by the ARDMS
- Vascular Sonographer (VS) by the ARRT
- Registered Vascular Specialist (RVS) (also known as RCVT) by Cardiovascular Credentialing International (CCI)

Vascular tech must be on-site during the performance of ROUTINE vascular examinations.




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## Ultrasound Accreditation Program Quality Control Requirements

- Eff. June 1, 2014, documentation of QC is required
- Includes acceptance testing, annual survey, routine QC tests, and preventive maintenance
- Initial applications & renewal submissions require annual survey reports
- Maximize the value of QC investment
- Physicist involvement is "strongly recommended"




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### ➤ Specific tests are required for Annual Survey

- All machines and probes must be tested
- Image Uniformity
- System Sensitivity
- Physical and mechanical inspection
- Display Performance – machine and interpretation

### ➤ An Ultrasound QC Manual *does not yet exist*

- Specific testing methods are not prescribed (subjective and objective methods are acceptable)
- Use of phantom(s) or test object(s) is required, but no specific vendor or model is given, and custom test objects are acceptable
- *No specific pass/fail performance criteria are prescribed*




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## Annual Survey Tests

optional ➤

optional ➤

optional ➤

Annual Survey (System Performance Evaluation)	
QC Test	Description
1. Physical and Mechanical Inspection	Assesses the mechanical integrity of the equipment, and the safety of patient and operator.
2. Image Uniformity and Artifact Survey	Identifies the presence of artifacts, often axial or lateral streaks in scans of uniform sections of a phantom. The use of "cross" images (i.e., images acquired without the use of gel or phantom) may also be useful in detecting superficial artifacts.
3. Geometric Accuracy (Optional)	Commonly involves use of the scanner's calipers to measure known distances between phantom test targets in the axial and lateral directions and also in the elevational direction for 3D probes. Other tests of geometric accuracy are acceptable, e.g., verifying accuracy of the pixel size calibration in the image header.
4. System Sensitivity	Methods relying on visual determination of the maximum depth of visualization of speckle patterns or phantom targets, and quantitative measurements of signal-to-noise ratio (SNR), have been reported.
5. Ultrasound Scanner Electronic Image Display Performance	Maintaining the performance of the image display is critical for providing the greatest diagnostic benefit of the scanner. Display characteristics that are evaluated may include gray scale response and luminance calibration, presence of dead pixels, and overall image quality. These evaluations are typically performed using specialized test pattern images, and may also require photographic equipment. (See ACR Technical Standard for Electronic Practice of Medical Imaging.)
6. Primary Interpretation Performance*	Primary diagnostic displays may be electronic soft-copy displays on a PACS workstation or hard-copy films. They should also include worklist monitors only if used for primary interpretation rather than color analysis. Display characteristics that are evaluated may include gray scale response and luminance calibration, presence of pixel defects, and overall image quality. These evaluations are typically performed using specialized test pattern images, and may require photographic equipment. (See ACR Technical Standard for Electronic Practice of Medical Imaging for additional information on tests and testing methods.) (*Only required if located in the facility where ultrasound is performed.)
7. Contrast Resolution (Optional)	The use of both anechoic and low contrast echogenic targets has been suggested, as has the use of 2D cylindrical targets and 3D spherical targets.
8. Spatial Resolution (Optional)	Should be measured in the axial, lateral, and elevational directions. Various approaches have been described for these measurements, via visual interpretation of groups of phantom (wire) targets and using computer-based algorithms to measure pixel dimensions.
9. Evaluation of QC Program (if applicable)	Provides an independent assessment of the QC program, checks that appropriate actions are taken to correct problems, identifies areas where quality and QC testing may be improved, and enables a comparison of QC practices with those of other ultrasound sites.

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**Equipment Evaluation Summary Form**

The Annual Survey **must** include:

- System sensitivity and/or penetration capability.
- Image uniformity and profile survey.
- Electronic image display performance and/or the quality of the images.

(Please refer to the Program Requirements for additional information.)

The Equipment Evaluation Summary Form may be used to detail the results of the Annual Survey. Please submit one form per transducer.

Note: Facilities are required to enter this form (one per transducer) or a complete QC report from the system engineer/physician. Facilities do not need to submit both.

Facility Name	Model	Report Date
System	Manufacturer	Survey Date
Transducer	Model	Transducer
Physician/Engineer	Signature	Date

**System Sensitivity (Required)**

With system sensitivity set up for maximum penetration, or depth in practice, what is the maximum depth you can visualize the background echogenic pattern?

Mark the appropriate box.

1) 12 cm	2) 15 cm	3) 18 cm	4) 21 cm
5) 24 cm	6) 27 cm	7) 30 cm	8) 33 cm
9) 36 cm	10) 39 cm	11) 42 cm	12) 45 cm
13) 48 cm	14) 51 cm	15) 54 cm	16) 57 cm
17) 60 cm	18) 63 cm	19) 66 cm	20) 69 cm
21) 72 cm	22) 75 cm	23) 78 cm	24) 81 cm
25) 84 cm	26) 87 cm	27) 90 cm	28) 93 cm
29) 96 cm	30) 99 cm	31) 102 cm	32) 105 cm

**Image Uniformity (Required)**

With gain set to obtain a uniform image, freeze the image. Complete the questions regarding the uniformity of the image by marking the appropriate box using this key:

1) Agree 2) Disagree, slight non-uniformity present 3) Disagree, major non-uniformity present

1) The image is uniform in color of the image in the same as the average brightness in the image.

2) There are no visible or clearly defined shadows from array element dropout.

3) There are no visible or clearly defined shadows from array element dropout.

4) There are no visible or clearly defined shadows from array element dropout.

5) There are no visible or clearly defined shadows from array element dropout.

**General Electronic Image Display Performance (Required)**

Display characteristics that are evaluated may include gray scale response and luminance calibration, presence of pixel artifacts, and overall image quality.

1) Completed

2) Not Completed

3) Not (Only required if located at the facility where ultrasound is performed.)

**ELECTRICAL AND MECHANICAL SAFETY AND CLEANLINESS (Required)**

Are all cords and cables properly stored?	YES	NO
Are all transducers stored without crack or deformation?	YES	NO
Are the transducers cleaned after each use?	YES	NO
Are the image monitors clean?	YES	NO
Are the air filters clean?	YES	NO
Are the wheel locks in working condition?	YES	NO
Are the wheels fastened securely to the U/S unit and do the wheels rotate easily?	YES	NO
Are all accessories (VCR, camera, etc.) fastened securely to the U/S unit?	YES	NO

Corrective Action Required?

YES NO

If so, please describe:

Additional Comments:

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**Primary Interpretation Display Performance (Required)**

Display characteristics that are evaluated may include gray scale response and luminance calibration, presence of pixel artifacts, and overall image quality.

1) Completed

2) Not Completed

3) Not (Only required if located at the facility where ultrasound is performed.)

**ELECTRICAL AND MECHANICAL SAFETY AND CLEANLINESS (Required)**

Are all cords and cables properly stored?	YES	NO
Are all transducers stored without crack or deformation?	YES	NO
Are the transducers cleaned after each use?	YES	NO
Are the image monitors clean?	YES	NO
Are the air filters clean?	YES	NO
Are the wheel locks in working condition?	YES	NO
Are the wheels fastened securely to the U/S unit and do the wheels rotate easily?	YES	NO
Are all accessories (VCR, camera, etc.) fastened securely to the U/S unit?	YES	NO

Corrective Action Required?

YES NO

If so, please describe:

Additional Comments:

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MODALITIES ACCREDITED FACILITY SEARCH HOW TO RESOURCES

[Ultrasound Accreditation Program FAQ Updated 2-16-16](#)  
[Ultrasound Quality Control FAQ Updated 11-7-14](#)  
[General Accreditation FAQ](#)

[Back to Top](#)

**03 | Register/Log In**

First-time applicants for ultrasound accreditation: Use the link below to register with the online accreditation system. Existing users: If you already have an account, please log in to access your facility records. If the login person has changed, please use the link below or contact [ultrasound-accred@acr.org](mailto:ultrasound-accred@acr.org).

- Access the online accreditation system
- Change user login

[Back to Top](#)

**04 | Gather Data**

Facilities applying for ultrasound accreditation must submit the following documents with their image submission for review:

- Ultrasound Quality Assurance Questionnaire
- Testing Information Updated 7-27-15
- Evaluation Attributes Updated 9-9-15
- Equipment Evaluation Summary

[Back to Top](#)

**05 | Prepare for Site Visits**

The ACR will perform unannounced site surveys to validate compliance with accreditation criteria. We strongly advise sites to use the documents below to gather and organize information for these site surveys.

Prepare for validation site survey »

[Back to Top](#)

## Routine QC program

- A continuous QC program is essential to assure the proper functioning of all ultrasound equipment and to identify problems before the diagnostic utility of the equipment is significantly impacted
- All machines and transducers in routine clinical use should be tested semiannually




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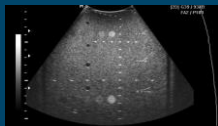
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## Routine QC Program

Typically performed by:

- Equipment service engineer
- Appropriately trained sonographer
- Biomed




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## Routine QC tests

Likely performed by sonographer(s) in the clinical practice twice per year (quarterly testing is recommended)

Routine QC		
QC Test	Description	Minimum Frequency
1. Physical and Mechanical Inspection	Assures the mechanical integrity of the equipment, and the safety of patient and operator.	Semiannually
2. Image Uniformity and Artifact Survey	Identifies the presence of artifacts, often axial or lateral streaks in scans of uniform sections of a phantom. The use of "in-air" images (i.e., images acquired without the use of gel or phantom) may also be useful in detecting superficial artifacts. All transducer ports on each scanner should be tested using at least 1 transducer.	Semiannually
3. Geometric Accuracy (mechanically scanned transducers only)	Commonly involves use of the scanner calipers to measure known distances between test targets. Measurement is required only in the mechanically scanned directions.	Semiannually
4. Ultrasound Scanner Electronic Image Display Performance	Maintaining the performance of the image display is critical for providing the greatest diagnostic benefit of the scanner. They should also include worklist monitors only if used for primary interpretation (other than color analysis). Display characteristics that are evaluated may include gray scale response, presence of pixel defects, and overall image quality. These evaluations are typically performed using specialized test pattern images. See ACR Technical Standards for Electronic Practice of Medical Imaging for additional information on tests and testing methods.	Semiannually

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## Ultrasound Evaluation Attributes

Outlines accreditation image requirements

GENERAL ULTRASOUND EXAMINATIONS	
Complete Upper Abdominal Exam	
<ul style="list-style-type: none"> <li>Liver               <ul style="list-style-type: none"> <li>Complete visualization of liver</li> <li>Tissue texture</li> <li>Vascular/ductal anatomy</li> </ul> </li> <li>Gall Bladder and Biliary Tree               <ul style="list-style-type: none"> <li>Complete visualization of gall bladder in multiple views</li> <li>Size of extra hepatic duct</li> </ul> </li> <li>Pancreas               <ul style="list-style-type: none"> <li>Complete visualization of pancreatic bed in multiple views</li> <li>Tissue texture</li> </ul> </li> <li>Spleen               <ul style="list-style-type: none"> <li>Complete visualization of splenic bed &amp; region in multiple views</li> <li>Tissue texture</li> </ul> </li> <li>Kidneys               <ul style="list-style-type: none"> <li>Representative views</li> <li>Renal length</li> </ul> </li> <li>Doppler US utilized when appropriate</li> </ul>	<b>GYNECOLOGICAL ULTRASOUND EXAMINATIONS</b> Female Pelvic Exam <ul style="list-style-type: none"> <li>Uterus               <ul style="list-style-type: none"> <li>Size, shape, orientation</li> <li>Endometrium</li> <li>Myometrium</li> <li>Cervix/vagina</li> </ul> </li> <li>Adnexa               <ul style="list-style-type: none"> <li>Ovaries: Size &amp; shape</li> <li>Ovary tissue texture</li> </ul> </li> <li>Calabash</li> </ul> <p><b>For GYN Module, at least one exam must be an endovaginal exam.</b></p>
<b>Small Parts</b> <ul style="list-style-type: none"> <li>Scrotum               <ul style="list-style-type: none"> <li>Complete evaluation of testis</li> <li>Tissue texture</li> <li>Epididymitis evaluation &amp; other peritesticular structures</li> <li>Doppler when indicated</li> </ul> </li> </ul>	<b>Thyroid/Parathyroid</b> <ul style="list-style-type: none"> <li>Complete evaluation in multiple views</li> <li>Tissue texture</li> </ul>

<http://www.acr.org/-/media/ACR/Documents/Accreditation/US/EvaluationAttributes.pdf>

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## Submission of Images

**Electronic \*Recommended\***  
**Three choices to upload images!**

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

• CD

• Film

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**TRIAD**  
ACR IMAGE AND INFORMATION EXCHANGE

Search Site... **GO**

Home Clinical Trials Accreditation Registries TRIAD Overview Tech Support

**TRIAD FOR ACR Accreditation**

TRIAD is an easy-to-use destination to submit your images electronically for ACR Accreditation.

[LEARN MORE](#)

**Clinical Trials**

TRIAD securely moves DICOM images, structured and unstructured reports, and DICOM RT objects across the Internet.

- User Guides & Documents
- Installation Information
- Imaging and Radiation Oncology

**Accreditation**

TRIAD overcomes the challenges of image submission with easy-to-use tools that reduce costs and streamline the process.

- User Guides and Documents
- Installation Information
- Accreditation Resources

**Registries**

TRIAD is used to collect, de-identify, and transmit the data securely from the participating facilities for the Dose Index Registry (DIR).

- User Guides & Documents
- Installation Information
- Registries Resources

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**Reminder: Ultrasound is location based, not unit based**

Section 1: Ultrasound Accreditation Program Modality Section

☒ Facility Information  
☒ Survey Agreement  
☒ Accredited

You may specify a different facility name, mailing address and apartment phone for your Ultrasound department. Please note that the name you specify here will appear on your Ultrasound certificate and your facility is approved.

Modality Name:    
 Contact E-mail Address:  cdaivson@tnt.com

☒ MAP  
☒ Pelvic  
☒ Fetal  
☒ Vascular

You have selected electronic submission for your images. Please note that you will be required to upload all applicable supporting documentation (i.e. physician report) for this facility's testing package. **Uploading images electronically is safe and secure. Electronic submissions are protected from unauthorized access and ACR has taken all measures to comply with federal privacy legislation.**

Type of Submission for Clinical Exams: **Electronic**

How many Ultrasound units are there at this location?  **Add Unit**

Which of the following ultrasound services are performed at this practice site location?  
 Sites are required to apply for all services performed.

Check all that apply:

☐ Obstetrical  
☐ Gynecological  
☐ General

Contact E-mail Address:  gdaivson@tnt.com

Type of Submission for Clinical Exams: **Electronic**

How many Ultrasound units are there at this location?

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## Benefits of Electronic Submission

- Secured server, files encrypted
- Mitigates the risk of losing images
- Reduces errors in incorrect submission format
- Cuts costs associated with burning and shipping CDs or films
- Reduces delays in shipping items between facilities, ACR and reviewers
- Reduces turnaround time
- Ensures compliance with HIPAA regulations throughout the process




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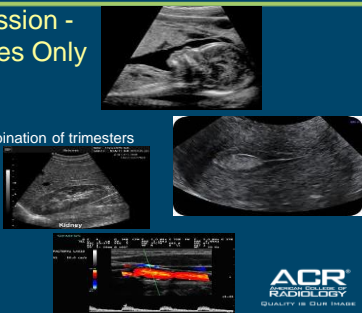
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## Exam Submission - Clinical Images Only

### Modules:

- Obstetrical
  - 1st, 2nd, 3rd, or any combination of trimesters
- Gynecological
- General
- Pediatric
- Vascular
- Peripheral
- Cerebrovascular
- Abdominal
- Deep Abdominal




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## Ultrasound Submission Review: Review Sheet Attributes

- A. Report Identification
- B. Exam Identification
- C. Image Quality
- D. Anatomic Coverage
- E. Additional Recommendations
- F. Additional Comments



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## Ultrasound Scoring

- 5 – Excellent
- 4 – Good
- 3 – Satisfactory
- 2 – Marginal
- 1 – Poor



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## Accreditation Outcome

- Determined by radiologist reviewers
- Scoring based on ACR Practice Parameters
- Each category must pass for site to be accredited
- Final report issued to site
- Certificate and Media Kit are issued upon approval
- Accreditation is granted for three years



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### If the site does not pass the first time:

- **Repeat**
  - ✓ Site retests the deficient area(s)
- **Appeal**
  - ✓ Site appeals the final outcome
  - ✓ The original images are reviewed by a senior reviewer not involved with the first review
- **Withdraw**
  - ✓ Site withdraws the section from accreditation process

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### If the site does not pass the second time:

- **Reinstate with Corrective Action Plan**
  - ✓ Site will submit a corrective action plan that ACR staff technologist must approve prior to image submission
  - ✓ All testing to be resubmitted
- **Appeal**
- **Withdraw**




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### Compliance Monitoring After Accreditation Granted

- Random On-Site Surveys
- Validation Site Surveys
- Targeted Film Checks




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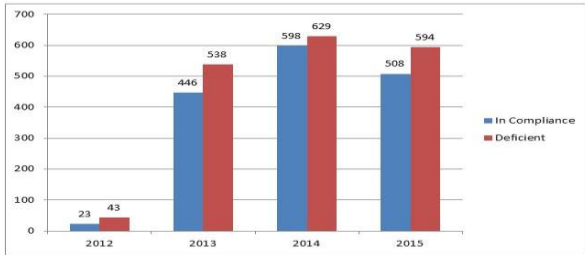
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## VSS Outcomes (Through 2015)




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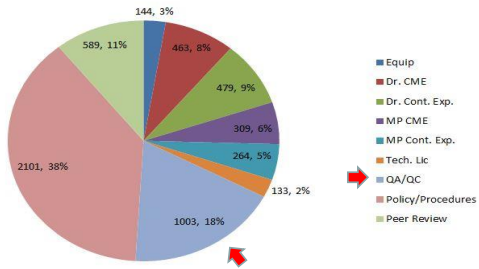
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## Deficiencies




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## Common Pitfalls in Ultrasound Accreditation



- Failure to review required attributes/testing instructions
- Incomplete Annual Survey report
- Failure to perform annual QC
- Lack of credentialed personnel
- Failure to send complete set of clinical images
- Submitting tech worksheets in place of physician reports
- Failure to submit diagnostic criteria for vascular exams




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## Accreditation Questions????



MODALITIES | ACCREDITED FACILITY SEARCH | HOW TO | RESOURCES



### GET ACCREDITED

Learn how to get started with ACR accreditation

**How To**

Our streamlined application process has not approval time in hat, with accreditation evaluation typically completed within 30 days of program submission.


- Read Our Accreditation FAQ Updated 6.2016
- Accreditation How Do I?
- Radiation Oncology Accreditation How Do I?
- ACR Accredited

**Webinars and Presentations**

Watch videos and access presentations for modality-specific information on ACR accreditation programs >

**Frequently Asked Questions**

Have questions about ACR accreditation and your specific modality? Check out our FAQs >



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## Keep up to date on Quality & Safety news!

**QUALITY & SAFETY**

- Accreditation
- Accredited Facilities
- Practice Performance
- Quality Improvement
- RUCAR Data Registry
- Technology Safety
- RUCAR™
- Reporting and Data Systems
- Additional Resources
- Webinars
- Contact Us

### Inside Quality & Safety eNews

Our new quarterly newsletter—Inside Quality & Safety—is focused on providing information, expertise and resources to help you improve your quality of care.

**Inside Quality & Safety - June 2016**

Q&S highlights from ACR 2016, new Lung Cancer Screening Registry P&G, Q&S with Gregory D. Hodge, MD, about QCDR, data registries and M&A's impact.

**Inside Quality & Safety - March 2016**

R-SCAN Q&A with Max Blankman, MD, easy and affordable accreditation for AI, advanced modules, quality and safety learning opportunities at two ACR conferences.

**Inside Quality & Safety - December 2015**

How this month, ACR accreditation launches new website, R-SCAN platform for services in select-based payment systems, new peer-review program for medical physicists using ACR's QCDR for P&G reporting, and much more.

**Inside Quality & Safety - September 2015**

Focus on lung cancer screening programs and resources, value-based payments in the joint Q&S was, streamlined accreditation process for CT and ultrasound, and updated content on content made to be available.

**QUALITY & SAFETY NEWSLETTER**

Sign up to receive our new e-newsletter and we'll send you Quality & Safety updates every quarter. [View latest issue](#)

[Sign Up Now >](#)

**SEE WHAT HEALTHYMEANS can do with a SINGLE CLICK**

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ACR's BUSINESS INTELLIGENCE by ITU

**QUALITY CASE NEWS**

July 16, 2016  
ACR Approved for IMAT 3.0 to Comply with IIRP and IIRP 2016 Edition

July 16, 2016  
QCDR Approved to Produce New ACR Digital Mammography Phantom

July 16, 2016  
The Joint Commission Creates Compliance Checklist for Diagnostic Imaging

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**HOO BOY, I'M HUNGRY!**

ME TOO, WHAT'S IN THE FRIDGE?

**EH, JUST A COUPLE OF ATOMS**

**WANNA SPLIT THEM?**

SURE!

**BOOM!**

© Quidade and Haspines © Explanet.net



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Questions?



1-800-227-5463 ext.3707

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*Thank You!*



Lake Thoreau Reston, VA

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