# *How to Help your Practice Achieve ACR CT Accreditation*

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# Outline

- What is it and why do it?
- Stakeholders
- How to best support the process
- Roles & Responsibilities
- Application process
- Ongoing effort
- Practical Advice & Conclusion

# What is accreditation?

- It is not an artificial hoop through which to jump

# *What is accreditation?*

Accreditation is an *ongoing*, *continuous* process that represents your CT practice



Think of your accredited CT practice as a nicely landscaped yard – you'll need to take care of it regularly

# *Why seek accreditation?*

- Reimbursement & accreditation support
- A window to best practices
- An evolving community standard

# Why is accreditation important?

*From*


The Joint Commission
Sentinel Event Alert

A complimentary publication of The Joint Commission

Issue 47, August 24, 2011

Radiation risks of diagnostic imaging

(The Joint Commission Sentinal Event Alert Issue 47, August 24, 2011)

As a result of the potential dangers … (CMS) will require the accreditation of facilities providing advanced imaging services in non-hospital, freestanding settings beginning January 1, 2012. In addition, the state of California has mandated that facilities that furnish CT X-ray services become accredited by July 1, 2013. In addition, in May, …(ACR) launched its National Radiology Data Registry (NRDR)…The fee-for-service registry includes a tool that can be used to target specific areas for improving practice.

# Why accreditation?

*An evolving community standard*

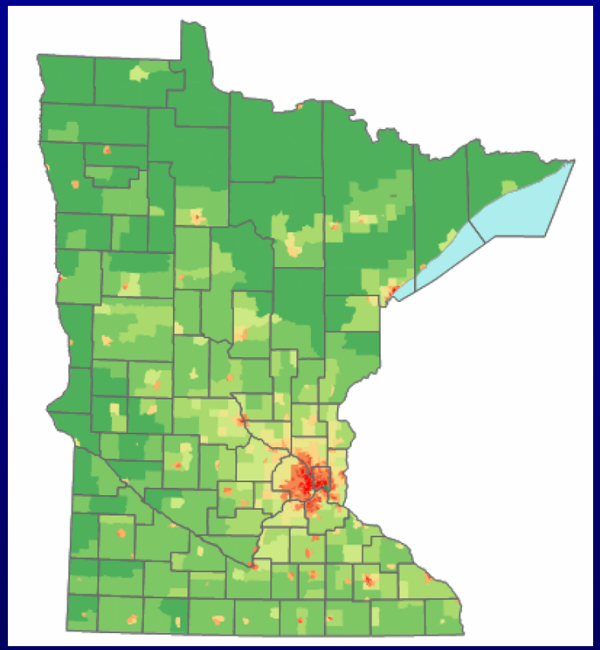
<u>Example</u>

State of Minnesota

Population: 5 million

Accredited CT imaging sites: 80

Applications under review: 15



# *Who are the stakeholders?*

- Radiologists
- Technologists
- Administrators
- Physicists
- Referring medical professionals
- Patients

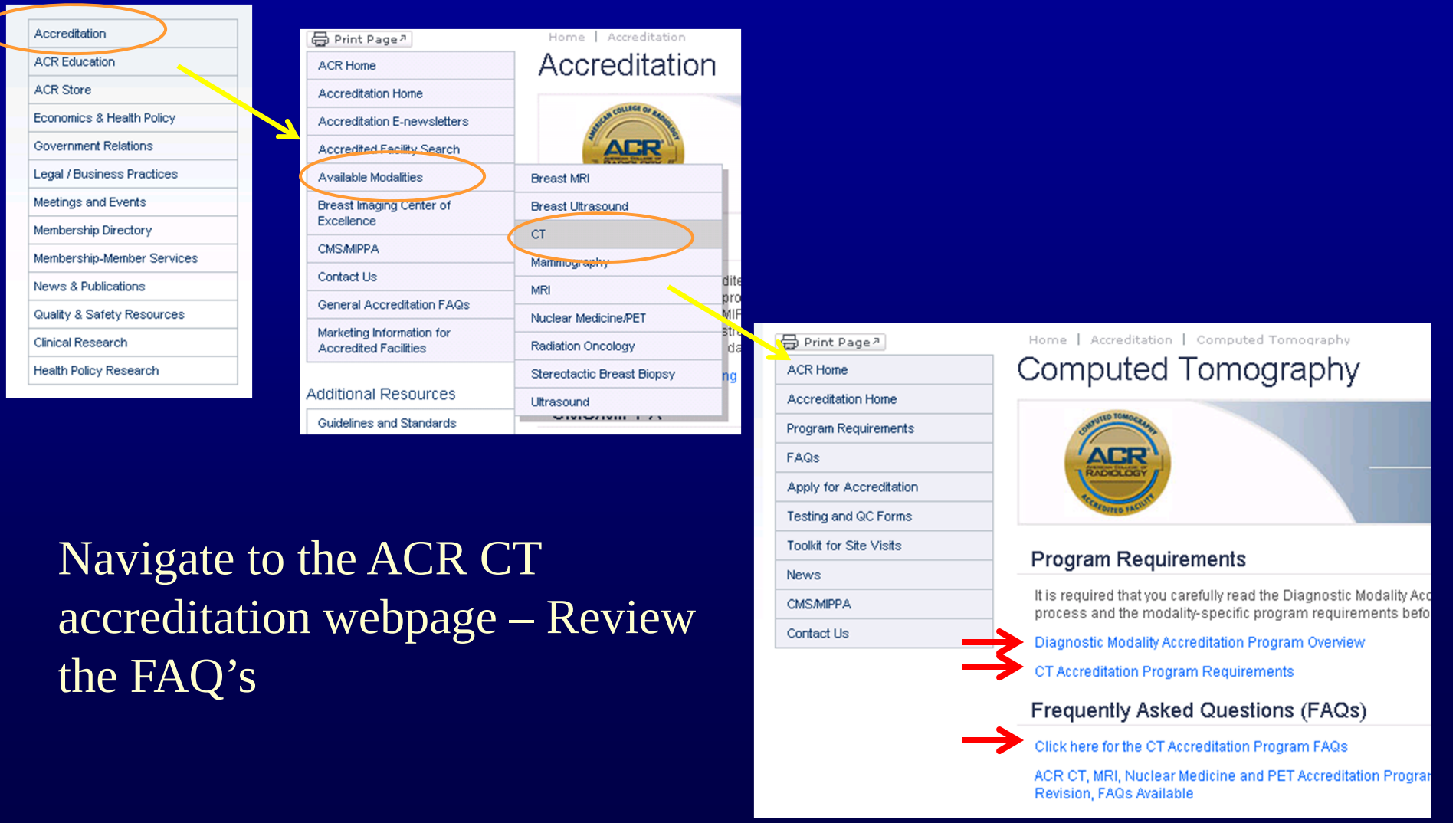
# *How to best support accreditation as a tech*

- Understand the “big picture”
- Know your specific job/role
- Know everyone else’s just a bit
- Develop a new culture: *Accreditation is a higher platform upon which your entire practice stands and thrives*

# How to best support accreditation as a tech

- Understand the “big picture”
- Start with the ACR website (www.acr.org)

# How to best support accreditation as a tech




Navigate to the ACR CT accreditation webpage – Review the FAQ's

# How to best support accreditation as a tech

From the "ACR CT Accreditation FAQ's"

**Q. My facility has never applied for accreditation before, and would like to become ACR Accredited for Computed Tomography. How do we get started?**

A. Start by reading the following documents, available on the ACR website:

- The Diagnostic Modality Accreditation Program Overview
- The ACR CT Accreditation Program Requirements
- The ACR CT Accreditation Clinical Image Quality Guide
- The ACR CT Accreditation Testing Instructions
- The ACR CT Accreditation Phantom Testing Instructions
- The ACR CT Accreditation Toolkit for Site Visits (FZ addition to list)

Details of accreditation programs vary among modalities,
→ read the CT-specific documents

# Roles & Responsibilities

- Radiologists
- Technologists
- Administrators
- Physicists
- Referring medical professionals
- Patients

# Role & Responsibilities of the Radiologist

**Physician**

All physicians who supervise and/or interpret CT examinations must be a licensed medical practitioner who meets the following minimum criteria

| Requirements for all Physicians Supervising and/or Interpreting CT Examinations | | |
|---|---|---|
| **Qualifications** | **Radiologists** | **Other Physician** |
| **Initial** | • Board certification in radiology or diagnostic radiology by:<br>  ○ ABR,<br>  ○ American Osteopathic Board of Radiology,<br>  ○ Royal College of Physicians and Surgeons of Canada, or<br>  ○ Le College des Medicins du Quebec, and<br>• Supervision, interpretation (and/or review) and reporting of 300 CT examinations in the past 36 months[1, 2]<br>OR<br>• Completion of an accredited diagnostic radiology residency, and<br>• Performance of, as well as interpretation and reporting of, 500 CT examinations in the past 36 months.[1, 2] | • Completion of an accredited specialty residency, and<br>• 200 hours of Category I continuing medical education (CME) in the performance as well as interpretation of CT in the subspecialty where CT reading occurs, and<br>• Interpretation and reporting of 500 cases during the past 36 months in a supervised situation.[2] |
| **Continuing Experience** | Upon renewal, physicians reading CT examinations across multiple organ systems must have read 200 exams over the prior 36 months.[3]<br>OR<br>For physicians reading organ system specific exams (i.e., body, abdominal, musculoskeletal, head) across multiple modalities they must read a minimum of 60 organ system specific CT exams 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 months.[3] | |
| **Continuing Education** | Upon renewal, Physicians must have earned at least 15 CME in CT (half of which must be category 1) hours in the prior 36-month period. | |

Note: There is a separate table for physicians interpreting cardiac CT

# Role & Responsibilities of the Radiologist

In addition, all physicians interpreting CT examinations must:

- Have completed an accredited diagnostic radiology residency or 80 hours of documented, relevant classroom instruction including diagnostic radiology and radiation safety physics. Otherwise, physicians must demonstrate training in the principles of radiation protection, the hazards of radiation exposure to both patients and radiological personnel, and appropriate monitoring requirements.
- Be thoroughly acquainted with the many morphologic and pathophysiologic manifestations and artifacts demonstrated on computed tomography. Additionally, supervising physicians should have appropriate knowledge of alternative imaging methods.
- Be knowledgeable of patient preparation, and training in the recognition/treatment of adverse effects of contrast materials[8] for these studies.
- Be responsible for reviewing all indications for the examination; specifying the use, dosage, and rate of administration of contrast agents[8], specifying the imaging technique, including appropriate windowing and leveling; interpreting images; generating written reports; and maintaining the quality of both the images and interpretations.
- Be familiar with the meaning and importance to the practice of CT of: total radiation dose to the patient, exposure factors, conscious sedation principles that are performed in the practice, and post-processing techniques and image manipulation on work stations.

# Role & Responsibilities of the Radiologist

In addition to being in compliance with the interpreting physician qualifications stated above, the *supervising physician* also has the following responsibilities:

- Develop, implement and enforce policies and procedures related to radiation protection, the hazards of radiation exposure to both patients and radiological personnel, and appropriate monitoring requirements.
- Develop, implement and enforce policies and procedures to address safety issues, including contrast use and sedation, and reduce exposure as much as reasonably possible for pediatric patients.
- Ensure that a physician is present and immediately available when contrast is administered to patients.
- Develop, implement and enforce policies and procedures to identify pregnant or potentially pregnant patients.
- Develop, implement and enforce policies and procedures consistent with ACR's Position Statement on Quality Control and Improvement, Safety, Infection Control, and Patient Concerns.
- Be responsible for assuring compliance with the recommendations of the medical physicist.
- Be responsible for the oversight and submission of all materials, including clinical and phantom images, as appropriate, quality control data and such other information as required by the CT Accreditation Program.
- Be responsible for notifying the ACR within 15 days of any changes in imaging equipment (units) or changes in the use of equipment that could affect clinical or phantom images (i.e., in CT an adults-only approved scanner being used to scan pediatric patients).
- Ensure that all accreditation criteria are met and that the same standard of performance is maintained during the 3-year accreditation period.
- Provide immediate written notice to the ACR upon the termination of any accredited services provided by the Practice Site or a change in ownership of the operating location.

# Role & Responsibilities of the Physicist

| Qualifications | Medical Physicist |
|---|---|
| Initial | **Board Certified**<br>Certified in Diagnostic Radiological Physics or Radiological Physics by the American Board of Radiology; in Diagnostic Imaging Physics by the American Board of Medical Physics; or in Diagnostic Radiology Physics by the Canadian College of Physicists in Medicine<br>OR<br>**Not Board Certified in Required Subspecialty**<br>• Graduate degree in medical physics, radiologic physics, physics, or other relevant physical science or engineering discipline from an accredited institution, *and*<br>• Formal coursework in the biological sciences with at least<br>– 1 course in biology or radiation biology, and<br>– 1 course in anatomy, physiology, or similar topics related to the practice of medical physics<br>• 3 years of documented experience in a clinical CT environment<br>OR<br>**Grandfathered**<br>Conducted surveys of at least 3 CT units between January 1, 2007 and January 1, 2010 |
| Continuing Experience | Upon renewal, 2 CT unit 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) |

# Role & Responsibilities of the Physicist

**Equipment**

CT equipment specifications and performance shall meet state and federal requirements and applicable ACR Practice Guidelines and Technical Standards.

**Quality Control**

A quality control (QC) program must be established and implemented under the supervision of a qualified medical physicist. Initial performance testing (acceptance testing) is required upon installation.

**Annual Medical Physicist Survey**

The medical physicist must evaluate the performance of each CT unit at least annually. ACR realizes that surveys cannot usually be scheduled exactly on the anniversary date of the previous survey. Therefore, a period of up to 14 months between surveys is acceptable. This evaluation should include, but not be limited to, the following:

Whether you have a staff physicist or a consultant

- Physicist role is ongoing during the year
- Advice: Discuss/arrange ongoing involvement if contracting w/consultant

# Roles & Responsibilities of the technologist

*From Table of Contents: ACR CT Accreditation Program Requirements*



The word "technologist" only appears in a couple of sections, does that mean a limited role for tech?

In fact, the tech has a significant role in almost all the required components – *often it is an indirect or informal role*

# Roles & Responsibilities of the technologist

Tech initial & continuing experience:

**Radiologic Technologist**

| Qualifications | Radiological Technologist |
|---|---|
| **Initial** | • ARRT certified and currently registered and/or unrestricted state license, and<br>• Documented training and experience in CT, and<br>• Documented training and experience in operating CT equipment and radiation physics and protection.<br>• Passing the advanced examination for CT certification is recommended. |
| **Continuing Education** | • Registered technologists<br>– In compliance with the CE requirements of their certifying organization for the imaging modality in which they perform services<br>– CE includes credits pertinent to the technologist's ACR accredited clinical practice<br>• State licensed technologists<br>– 24 hours of CE every 2 years<br>– CE is relevant to imaging and the radiologic sciences, patient care<br>– CE includes credits pertinent to the technologist's ACR accredited clinical practice<br>• All others<br>– 24 hours of CE every 2 years<br>– CE is relevant to imaging and the radiologic sciences, patient care<br>– CE includes credits pertinent to the technologist's ACR accredited clinical practice |

# Roles & Responsibilities of the technologist

**Continuous Quality Control**

A continuous quality control (QC) program must be established for all CT units with the assistance of a qualified medical physicist. The qualified medical physicist should determine the frequency of each test and who should perform it based on the facility and CT usage. An on-site radiological technologist should be identified to be responsible for conducting routine quality control.

The continuous QC program should include, but not be limited to, the following:

- Image quality
  1. High-contrast (spatial) resolution
  2. Low-contrast resolution
  3. Image uniformity
  4. Noise
  5. Artifact evaluation
- Alignment light accuracy
- Slice thickness
- CT number accuracy
- Display devices

All quality control testing must be carried out in accordance with written procedures and methods. Preventive maintenance must be scheduled, performed, and documented by a qualified service engineer on a regular basis. The results of the QC program must be monitored annually by the qualified medical physicist. If the results of a QC test fall outside the control limits, corrective action should be taken. A qualified medical physicist should be available to assist in prescribing corrective actions for unresolved problems. All deficiencies must be documented and service records maintained by the CT facility.

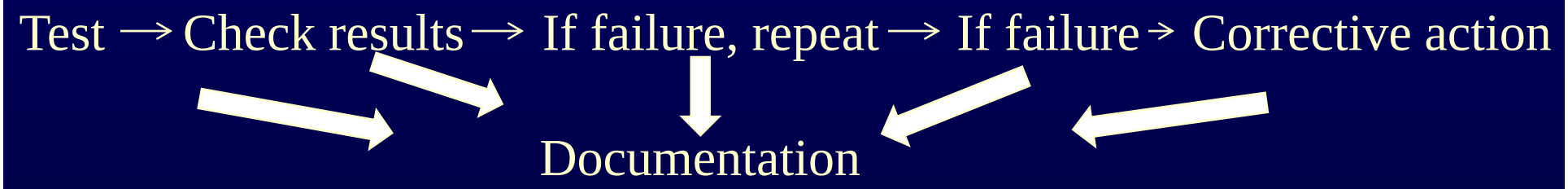
# Roles & Responsibilities of the technologist

## Quality Control Note

*All* technologists should understand the QC program:

- Requirements
- Action levels
- Corrective Actions

Process:



# Practical Advice

- Continually refer to the guidance documents
- Seek advice/guidance from colleagues, other facilities
- Balance the urge to do everything with the necessity for all to acknowledge & perform their roles
- Don't file accreditation issues away after completion – pull out the site visit tool kit & keep accreditation "on your plate"

# Summary/Conclusion

- Know "the big picture." ACR website has a trove of useful & important documents – familiarize yourself w/the website & its contents
- The tech has defined formal role and likely a huge informal or indirect role in accreditation
- There is a continuous quality control requirement and all techs should be familiar with it
- Accreditation is an ongoing process –

*Welcome it as a positive enhancement to your practice!*