DICOE Program Requirements



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Revisions

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| 9/30/2022 | 12 | Radiation and General Safety |
| 9/30/2022 | 9 | Facility Organization and Management |
| 3/15/2022 | 13-14 | Quality Manual Outline |
| 8/10/2020 | 26-27 | Bibliography |
| 7/15/2020 | 24-25 | Frequently Asked Questions |
| 7/15/2020 | 23 | DICOE General Recommendations |
| 6/20/2020 | 4&5 | Introduced new DICOE eligibility criteria |
| 6/20/2020 | 6 | Recommend structured reporting (SR), CD free image transfer and use of Clinical Decision System (CDS) |
| 6/20/2020 | 8 | Clarification of ACLS requirement is only for Cardiac Stress test |
| 6/20/2020 | 8 | Added emphasis on physicians or physicians designee's presence during contrast administration |
| 6/20/2020 | 10 | Highly recommend sites with EMR, PACS, RIS to create a disaster recovery policy and audit records |
| 6/20/2020 | 12 | Removed Iso/LOCM contrast language, instead sited website to follow guidelines. |
| 6/20/2020 | 9 | Added general radiography and fluoroscopy modalities to the DICOE onsite survey. |
| 11/29/15 | 9 | Clarification of when to ask female imaging patients about pregnancy. |
| 7/20/2015 | 7 | Added Advanced Radiology Life Support (ARLS) for facilities that perform only contrast studies. |
| 8/22/2013 | 6 | Clarification of clinical staff (nurses, aides, etc.) licensure. |

Introduction

The American College of Radiology's Diagnostic Imaging Center of Excellence (DICOE) designation reflects diagnostic imaging excellence at multiple levels. This designation is a pinnacle of medical imaging services. The DICOE team experts assess the qualifications of personnel, policies and procedures, equipment specifications, quality assurance (QA) activities, patient safety, image quality, and ultimately the quality of patient care. DICOE program takes accreditation to the next level by providing a comprehensive assessment of the entire medical imaging enterprise including operations and outcomes.

The American College of Radiology (ACR) accreditation programs for diagnostic imaging are modality based. The DICOE designation is applicable for an entity providing single modality or multimodality services. Our goal is to provide a Center of Excellence (COE) framework for a practice, so that your team is ready to adopt, implement and maintain superior patient care.

Eligibility Criteria

Diagnostic imaging facilities must meet the following basic criteria's:

- 1. The facilities that wish to apply for this designation must be accredited by the ACR in all modalities that they provide.
- 2. The entity must also participate in the ACR's General Radiology Improvement Database (GRID) and the Dose Index Registry (DIR)[®].
- 3. The facility/ staff must pledge to Image Gently[®] and Image Wisely[®].
- 4. Lastly, applicants must agree to an on-site survey by a team that includes a radiologist, a medical physicist, and a radiologic technologist or ACR senior accreditation staff.

A healthcare network, hospital, outpatient, or freestanding imaging center regardless of their size or locations are encouraged to apply for a DICOE designation. The entity can offer a single or multiple modality service. The DICOE team is available to help all sites.

Please note the upcoming change in the #2 of the above-mentioned eligibility criteria.

Beginning January 1, 2021, facilities can select two NRDR registries based on facility's offered services:

• Sites with CT service must participate in the ACR Dose Index Registry (DIR®) and select a second NRDR registry (see options below)

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• Sites without CT service must participate in General Radiology Improvement Database((GRID®) and select a second registry (see options below)

The ACR currently offers the following NRDR registries:

- <u>Clinical Decision Support (CDS) registry.</u> The ACR CDS registry provides facilities with access to their image-ordering clinical decision support data that correspond to imaging <u>CMS Priority Clinical Areas</u>, and several other imaging areas.
- <u>CT Colonography (CTC) registry</u>. The ACR CTC registry helps participants promote quality of care for patients undergoing CT Colonography.
- <u>Lung Cancer Screening (LCSR) registry</u>. The ACR LCSR registry helps clinicians monitor and demonstrate the quality of CT lung cancer screenings in their practice through periodic feedback reports that include peer and registry benchmarks.
- <u>National Mammography Database (NMD) registry</u>. The ACR NMD registry is a quality improvement tool that uses data already collected under MQSA federal mandate to create reports that benchmark facility and physician performance and exceed the FDA's audit data collection requirements
- <u>DIR registry</u>. Since 2011, the ACR DIR has helped clinicians and facilities improve the quality of patient care by collecting CT dose indices through automated data transmission and leveraging that data to provide feedback to participants and establish national benchmarks.
- <u>GRID registry.</u> The ACR GRID registry is a robust dataset of process measures (e.g., turnaround times, wait times) and outcomes (e.g., adverse incidents) that helps participants pinpoint problems.
- <u>3D Printing</u> Data collected are indented to answer questions about clinical indications and intended uses of printed models.

Please access <u>NRDR Support Page</u> for further information.

With more NRDR registries from which to choose for DICOE eligibility, sites can select those that best suit their business model. Per our current and future changes, DICOE sites can opt to participate in DIR and GRID registry.

Survey process

The survey team meets with staff designated by the facility, including the radiologist medical director, medical physicist, lead technologist and chief administrator. Other staff also may be interviewed as deemed appropriate by the survey team. Areas of assessment include:

- Governance
- Personnel
- Facility organization and management

- Physical environment
- Equipment including viewing conditions and IT infrastructure
- Radiation and general safety
- Quality management and outcomes measurement system
- Policies and procedures
- Patient rights
- Medical records
- Infection control
- Communication
- Utilization review
- Outcomes

DICOE surveyors will inquire about any innovative tools or best practices created and utilized by the facility. For example, use of structured terminology / structured reporting used by radiologist, Integration of clinical decision support (CDS) in order entry, CD free image transfer (electronic image transfer between providers and/or patients) etc.

For a multisite practice, our onsite survey is planned at the main site along with additional satellite sites. Upon reviewing a multisite application, the DICOE coordinator will determine additional sites to be surveyed on case-by-case basis.

If the facility has had a Validation Site Survey within 1 year of the DICOE survey that data should be supplied to the team and only a random sample of those items needs will be verified.

Structure of the Diagnostic Imaging Facility

Governance (GM) GM 1.0 Governing Body

Standard: An overarching group or body is legally responsible for the operation and performance of the entity. If the entity is part of a larger organization with an existing governing body (as in a hospital), there is an individual(s) responsible for overseeing imaging department operations and performance.

Elements of Compliance:

GM 1.1 The entity must have governance (body, committee, lead) in place that is responsible for establishing mission, goals, and objectives of the entity.

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- GM 1.2 The governing body is responsible for approval and implementation of policies and procedures.
- GM 1.3 The governing body is responsible for financial management, approval of contracts and other legal arrangements for the entity.
- GM 1.4 The governing body ensures compliance with federal, state, local and other relevant regulations.
- GM 1.5 The governing body ensures that effective communications are developed and maintained both within and external to the entity.
- GM 1.6 The governing body ensures that patient safety and quality of care are evaluated, and problems are appropriately addressed.
- GM 1.7 The governing body should meet on a regular basis, at least annually, to review the operations and performance of the entity. Minutes or other records should be kept.

Personnel (SF) SF 1.0 Personnel

Standard: The entity must have staff who meets necessary qualifications through education and experience.

Elements of Compliance:

- SF 1.1 The entity must have a supervising physician who is ABR, ABNM, or AOBR-certified with knowledge of the diagnostic imaging procedures that are offered.
- SF 1.2 The supervising physician must be engaged in the clinical practice of advanced imaging and the quality management of the services being offered.
- SF 1.3 The entity must have personnel (e.g., medical physicists, radiologic technologists, radiologic nurses, etc.) on staff who are knowledgeable about diagnostic radiology and are able to coordinate the evaluation, care and education of patients and their families in a safe and timely manner.
- SF 1.4 All radiologic technology staff must be state licensed (where state licensure exists) to perform radiographic procedures <u>and</u> be certified by

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the appropriate certifying agency, i.e., American Registry of Radiologic Technologists (ARRT), American Registry for Diagnostic Medical Sonography (ARDMS), Nuclear Medicine Technology Certification Board (NMTCB), American Registry of Magnetic Resonance Imaging Technologists (ARMRIT), or the Canadian Association of Medical Radiation Technologists (CAMRT) It is recommended that at least one technologist per shift have advanced certifications for all modalities offered.

- SF 1.5 All other clinical staff (nurses, aides, etc.) must be state licensed within their discipline.
- SF 1.6 The entity must have adequate, appropriately trained staff to provide service for all hours of operation based on their patient volumes.

Facility Organization and Management

FO 1.0 Facility organization and management

Standard: The facility should have clearly defined lines of authority including subspecialty services as appropriate.

Elements of compliance:

- FO 1.1 Responsibilities and reporting lines should be defined in job descriptions for each category of staff.
- FO 1.2 The facility should have scheduled hours of service to meet the needs of their defined patient population.
- FO 1.3 The facility must have adequate access for disabled patients.
- FO 1.4 The facility must comply with the following accreditation practice guidelines:
 - 1.4.1 Facilities monitoring cardiac stress studies must have one staff that has current Advance Cardiac Life Support (ACLS)/ Pediatric Advanced Life Support (PALS) certification as appropriate. This requirement is limited to Nuclear Medicine/PET examinations only.

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- 1.4.2 Physician must always be on-site, for a diagnostic imaging with contrast. All physicians supervising and/or interpreting nuclear medicine examinations must satisfy all applicable state and federal regulations, as well as any institutional policies that pertain to the in vivo use of radiopharmaceuticals, the use and dosage of contrast, if applicable, the performance of imaging procedures and the safe handling of radioactive materials.
- FO 1.5 In case of serious complications, the facility must have a documented procedure to transport and/or admit the patient.

Physical Environment (PE) PE 1.0 Physical environment

Standard: The size and layout of the facility must be adequate to allow for patient comfort, privacy and special needs as well as fostering appropriate workflow. This includes areas for imaging exams, control rooms, processing, image interpretation, patient changing, recovery/post-procedural care, waiting, administration, storage, record filing, medical physics services, engineering services, and staff.

Equipment (EQ)

Please note the upcoming changes effective January 1, 2021

Although ACR does not have an accreditation program, DICOE site survey will include review of routine diagnostic imaging (x-ray) and fluoroscopy. Our emphasis will be in following

- ✤ Equipment safety
- Radiation Safety
- ✤ Use of protocol
- Documenting fluoroscopy dose

EQ 1.0 Equipment

Standard: Equipment, viewing conditions, and IT infrastructure including RIS and PACS systems, must be adequate for the types and volumes of services provided.

- EQ 1.1 All units for all modalities must have passed the ACR modality-specific accreditation evaluation.
- EQ1.2 ACR does not have an accreditation program for general radiography and fluoroscopy. Our surveyors will review overall performance standards for radiation safety practices implemented to perform routine diagnostic and

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fluoroscopic procedures. We recommend that all sites review the ACR practice parameters outlined for General Radiography¹ and ACR-AAPM technical standards for Fluoroscopy²

- EQ1.3 All equipment must have documented routine preventive maintenance, quality control records, and an annual medical physicist survey. At least once a year, the medical physicist must review and sign these documents. For ultrasound, a semi-annual preventative check can be performed by a sonographer, medical physicist, or service engineer. The facility must allow the QC technologist sufficient time to perform routine QC and any necessary corrective action.
- EQ 1.4 All facilities using Radiology Information System (RIS) and Picture Archiving and Communication System (PACS) must have a Downtime and Recovery Plan policy³.

Radiation and General Safety (RS) RS. 1.0 Radiation and general safety

Standard: The facility must have policies and procedures in place to address all areas of safety for patients and personnel including limiting unnecessary exposure to radiation and insuring safety of the MRI environment.

Elements of Compliance

- RS 1.1 The facility must have a designated Radiation Safety Officer (RSO) who is responsible for the radiation protection of the staff and the public if ionizing radiation is used. In most cases, this person will be a medical physicist. If not a medical physicist or health physicist, the RSO should be a radiologist, nuclear medicine physician or radiation oncologist familiar with radiation safety requirements. All exam protocols must be reviewed annually.
- RS 1.2 The facility must have a Radiation Safety Committee that meets on a regular basis in compliance with state or federal regulations or at least

¹ <u>https://www.acr.org/-/media/ACR/Files/Practice-Parameters/RadGen.pdf?la=en</u>

² ² <u>https://www.acr.org/-/media/ACR/Files/Practice-Parameters/mgmtfluoroproc.pdf?la=en</u>

³ ³ <u>https://www.acr.org/-/media/ACR/Files/Practice-Parameters/elec-practice-medimag.pdf?la=en</u>

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semi-annually.

- RS 1.3 Radiation and MRI hazard signs must be posted in appropriate, places including entrances to CT and MRI scan rooms, areas for radioactive materials, radioactive waste storage areas, and any hazardous material areas⁴.
 - RS 1.3.1 For MRI, Zone III* regions should be physically restricted from public access by, for example, key locks, passkey locking systems, or any other reliable, physically restricting method that can differentiate between MR personnel and non-MR personnel.
 - RS 1.3.2 For MRI, Zone IV* there must be a policy and procedure in the event of a loss of power to the site.

*For definitions of the Zones in MRI see ACR Guidance Document for Safe MR Practices at https://www.acr.org/Clinical-Resources/Radiology-Safety/MR-Safety

- RS 1.4 There must be a patient ID check including two identifiers before initiating the exam.
- RS 1.5 All diagnostic imaging patients must be screened regarding previous or recent exams.
- RS 1.6 All female patients of menstrual age (typically ages 12 through 50 years), undergoing diagnostic imaging must be screened for pregnancy to reduce a radiation risk. We highly recommend that all sites follow their state Health Department policy. All sites must have a written policy to guide the staff accordingly.

This would not be necessary for radiological examinations that render exposures to a pregnant uterus that are so low that pregnancy status need not alter the decision to proceed with a medically indicated examination. The beam must be properly collimated, and the patient is positioned to avoid direct irradiation of the pelvis (e.g., mammography, chest radiography during the first and second trimesters, extremity radiography or extremity CT [except for the hip] and diagnostic examination of the head or neck).

RS 1.7 All diagnostic imaging patients receiving contrast media must be screened for potential allergies or other adverse reactions before contrast is

⁴ ACR GUIDANCE DOCUMENT ON MR SAFE PRACTICES: 2013

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administered.

- RS 1.8 The following attributes must be included on all images:
 - Patient's first and last name
 - Medical record number
 - Institution name
 - Date and time of examination
 - Date of birth or age of patient
 - Patient gender
 - Standardized view and laterality codes as appropriate
- RS 1.9 Standardized protocols must be in place for all exams. The medical physicist should participate in the development of the protocols in consultation with the radiologist.
- RS 1.10 The facilities must have protocols in place to optimize dose. Dose optimization entails controlling the amount of radiation received by the patient while ensuring the diagnostic integrity of the exam.
- RS 1.11 The facility is expected to use appropriate contrast agent. We recommend the facilities review ACR- contrast media document for further guidance⁵
- RS 1.12The provider of direct supervision must be available to furnish further assistance and directions throughout the performance of the procedure. When under the general supervision of the radiologist, the following providers may provide direct supervision of intravenous contrast administration:
 - Non-radiologist physicians (MD/DO)
 - Advanced practice providers (nurse practitioner, physician assistant)
 - Registered nurses following a system- and sign- driven treatment algorithm.
- RS 1.13 There must be adequate shielding for patients, personnel, and facilities.
- RS 1.14 A system to secure and dispose of radioactive materials including radionuclides and radioactive wastes must be in place. This system should also limit access to such materials.

⁵ https://www.acr.org/-/media/ACR/Files/Clinical-Resources/Contrast_Media.pdf

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RS 1.15 All sites must follow the current recommendations of the ACR Guidance Document for Safe MR Practice⁶.

Standard: The facility must have policies and procedures in place to provide care in the event of an emergency such as a contrast reaction or cardiac arrest. Equipment appropriate to the site of care must be available.

Elements of Compliance:

RS 1.16 The facility must have a defibrillator on site.

- RS 1.17 In hospitals serving adults, a crash cart with appropriate, unexpired drugs and equipment must be available. In non-hospital or pediatric hospitals, appropriate life support equipment should be available to the patient population.
- RS 1.18 If the facility does not provide emergency services, it must have written policies and procedures for appraisal of emergencies, initial treatment, and appropriate referral.
- RS 1.19 If the facility is off-campus to a hospital and does not provide emergency services; the department will coordinate and comply with written hospital policies for appraising and referring emergencies that occur off-campus. Off-campus facility staff should be aware of emergency policies and procedures and understand their roles and responsibilities.

Quality Management (QM) QM 1.0 Quality Management System

Standard: The entity has a quality management system that is a framework for continuous quality improvement.

Elements of Compliance:

QM 1.1 The entity has implemented and maintains an effective Quality Management system.

⁶ https://www.acr.org/Clinical-Resources/Radiology-Safety/MR-Safety

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QM 1.2 The QM system ensures corrective and preventive actions are implemented, measured, monitored, and documented.

1.2.1 The QM system has a methodology for how quality and performance are measured, monitored, analyzed, and improved.

QM 2.0 Quality Manual Outline

Standard: The entity clearly outlines its methodology, practices, and policies for addressing how quality management is conducted.

Elements of Compliance:

QM 2.1 The entity maintains a Quality Manual that should include:

- 2.1.1 Quality Compliance team structure and responsibilities (QM 3.1)
- 2.1.2 Yearly Quality Manual review& sign off sheet
- 2.1.3 Image Gently/Image Wisely pledge (QM4.2) (UR1.0)
- 2.1.4 NRDR Registry most recent site reports
- 2.1.5 Statement of methodology, practices, and policies for QM program
- 2.1.6 Practice QM projects (QM4.0 & 4.4)
- 2.1.7 Policy and Procedure (P&P) for Patient Safety Measures (QM 5.1)
- 2.1.8 P&P for Radiation and General Safety (RS1.0)
- 2.1.9 P&P Contrast Administration
- 2.1.10 P&P for Communication including critical results (CC 1.0)
- 2.1.11 P&P for MRI (safety, screening, emergency procedures, & education)
- 2.1.12 P&P for Nuclear Medicine and PET (Hot lab Safety, Cardiology)
- 2.1.13 P&P for Peer Review/Peer Learning (per accreditation requirements)
- 2.1.14 P&P for Patient Rights (PR 1.0)
- 2.1.15 P&P for Medical Record Maintenance, Storage and Handling
- 2.1.16 P&P Infection Control (IC 1.0)
- 2.1.17 P&P Handling Emergency Services (ES)

QM 2.2 The entity reviews the Quality Manual at least once annually.

QM 3.0 Quality Manager

Standard: The entity has a designated Quality Manager.

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Elements of Compliance:

QM 3.1 The entity has designated a quality manager with the responsibility and authority to accomplish the requirements of the QM system.

QM 4.0 Measurement, Evaluation and Analysis

Standard: As part of the Quality Management System, the entity should evaluate all services and processes. Evaluation should include monitoring through internal audits or reviews at scheduled intervals. Measuring requires use of established measures that can detect variation, identify problem processes, and identify outcomes and effectiveness of actions. Frequency and detail of measurement must be established.

Elements of Compliance:

- QM 4.1 The entity conducts performance improvement projects annually in proportion to scope/complexity of operations/services.
 - 4.1.1 Projects are documented and include rationale for selection and progress achieved
 - 4.1.2 Facility or department-based projects must be conducted as well as individual projects specific to radiologists, technologists, and nurses.
 - 4.1.2.1 Practice Quality Improvement (PQI) projects for Maintenance of Certification (MOC), RADPEER or equivalent, participation in Physician Quality Reporting Initiative (PQRI) as applicable.
 - 4.1.2.2 Technologists must participate in performance improvement projects relevant to their roles.
- QM 4.2 The entity participates in Image Gently and Image Wisely as appropriate to modalities available (CT, fluoroscopy, and interventional procedures).
- QM 4.3 The entity uses GRID and DIR reports/benchmarks for performance improvement projects
- QM 4.4 The entity must define the frequency and detail of measurement but at minimum the following functions should be measured:

4.4.1 Threats to patient safety

4.4.2 Medication use

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- 4.4.3 Procedures- wrong site, wrong patient, wrong procedure
- 4.4.4 Sedation
- 4.4.5 Effectiveness of pain management system for interventional procedures including all biopsies.
- 4.4.6 Infection control system
- 4.4.7 Patient flow issues, excess wait time
- 4.4.8 Customer satisfaction (clinical and administrative areas). Satisfaction surveys should be developed both for patients and referring providers.
- 4.4.9 Discrepant radiology reports: The ACR Practice Guideline for Communication of Diagnostic Imaging Findings recommends expedited reporting of non-routine communications such as discrepant preliminary and final interpretations.
- 4.4.10 Deaths, non-sentinel event, sentinel event, near-miss
- 4.4.11 Other adverse events
- 4.4.12 Medical record delinquency

QM 5.0 Patient Safety System

Standard: The entity has a means for establishing clear expectations for patient safety.

Elements of Compliance:

- QM 5.1 The entity must clearly identify methods for detecting prevalence and severity of incidents impacting patient safety, including medical errors and adverse patient events. This patient safety system should address:
 - 5.1.1 Preventive/corrective action
 - 5.1.2 Defined processes to reduce risk
 - 5.1.3 Implemented action plans
 - 5.1.4 Ongoing measurement
 - 5.1.5 Management review of response and resource allocation to results of adverse event analysis
 - 5.1.6 Policy/practice for informing patients and families about adverse events
- QM 5.2 If interventional procedures are performed; the facility should have a tracking system for complication rates and outcome monitoring.

Patient Rights (PR) PR 1.0 Patient Confidentiality

Standard: The entity must have in place, policies and procedures which ensure the protection of patient confidentiality as defined by local, state and federal regulations.

Elements of Compliance:

- PR 1.1 The entity will collect, and file signed confidentiality agreements from all staff that have access to patient data.
- PR 1.2 Each entity must have policies and procedures in place to ensure that the security and confidentiality of patient information is respected throughout the patient's stay in the radiology facility. Patient information includes demographic information, clinical information, and medical images. Information may be in written or electronic form.
- PR 1.3 Each entity must have a compliance program in place as required under the Health Insurance Portability and Accountability Act (HIPAA) and Health Information Technology for Economic and Clinical Health Act (HITECH Act).

PR 2.0 Physical Privacy

Standard: The entity must have in place, policies, and procedures, which ensure the privacy rights of patients.

Elements of Compliance:

- PR 2.1 Each entity must have policies and procedures in place to ensure that the patient's physical privacy is respected throughout the patient's stay in the radiology facility.
- PR 2.2 The physical environment includes the waiting room, changing room, examination room, post-procedure observation room, and counseling room.

PR 3.0 Patient Complaint Process

Standard: The entity must have in place, policies and procedures for the collection and resolution of patient complaints.

Elements of Compliance:

- PR 3.1 All documentation regarding each serious complaint received by the facility must be maintained for at least 5 years from the date the complaint was received unless otherwise mandated by state or federal law or regulation.
- PR 3.2 The entity must post a notice that provides the consumer with adequate directions for filing serious complaints with the facility's accreditation body if the facility is unable to resolve a serious complaint to the consumer's satisfaction.

PR 4.0 Informed Consent

Standard: The entity must obtain written, informed consent from each patient (or from patient's authorized representative) for the provision of imaging services requiring such consent.

Elements of Compliance:

- PR 4.1 The entity must have policies and procedures in place for obtaining informed written consent.
- PR 4.2 The consent must include an explanation of risks, benefits, and alternatives for the following:
 - 4.2.1 high-risk procedures
 - 4.2.2 procedures requiring sedation
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- 4.2.3 participation in research projects
- 4.2.4 and/or otherwise defined by local, state, or federal law.

Medical Records (MR) MR 1.0 Medical Records Maintenance, Storage and Handling

Standard: The entity must have policies and procedures in place for proper maintenance, storage, and handling of medical records.

MR 1.1 The entity must maintain medical imaging records for each patient for at least 5 years or as required by the state.

Assessment: Review a sample of records for compliance with date maintenance.

- MR1.2 The entity must maintain records electronically or physically in a secure, protected area.
- MR 1.3 The entity must have a process for filing and retrieving the medical record.
- MR 1.4 Upon written request from the patient the entity must have a process for transferring images or reports within 2 weeks.

MR 2.0 Confidentiality of Medical Records

Standard: The entity must ensure confidentiality of medical records.

- MR 2.1 The entity must have policies and procedures for obtaining information from a patient medical record, in whole or part.
- MR 2.2 The entity must have a process for proper authorization and release of information from the medical record.
- MR 2.3 Original medical records should be released only in accordance with Federal and State laws, court orders or subpoenas.
- MR 2.4 At the time of the examination, the entity must inform patients about how to obtain their images and medical records. Images or reports must be provided in a manner that is useful to the recipient, e.g. media capability of recipient determined.

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MR 3.0 Medical Record Completeness

Standard: The entity creates medical records that are uniform, consistent, and complete for each patient

- MR 3.1 The medical record should be complete and contain copies of reports, films, scans, or other image records.
- MR 3.2 The content and format of patient records are consistent and must include at minimum:
 - Name
 - Identification number
 - Date of birth
 - Gender
 - Responsible party
- MR 3.3 The patient record contains up-to-date information on allergies or material/drug reactions in a prominent and uniform location.
- MR 3.4 All radiology reports in the medical record should be signed by the interpreting physician.
- MR 3.5An addendum report must contain both the original report and an addendum report.

Infection Control (IC)

IC 1.0 Infection Control

Standard: The entity must have in place, an infection control program for the prevention, control and surveillance of infections and communicable diseases of patients and personnel (including, but not limited to, staff in direct contact with patients).

Elements of Compliance:

- IC 1.1 The entity must have policies and procedures in place to address the prevention, control and surveillance of infections and communicable diseases of patients and personnel. These policies and procedures must include information addressing the following:
 - IC 1.1.1 The promotion of hand washing hygiene among all staff

- IC 1.1.2 A clean physical environment, including but not limited to, the clinical area, radiology equipment and devices must always be maintained.
- IC 1.1.3 The appropriate disinfectants, antiseptics and germicides must be appropriately used for the cleaning and disinfecting of all radiology equipment and devices.
- IC 1.1.4 Personnel must use appropriate personal protective equipment (e.g., gowns, masks, gloves, goggles) for contact with patients with known or suspected infection.
- IC 1.1.5 Adherence to CDC and other nationally recognized, evidencebased guidelines for infection prevention and control precautions
- IC 1.2 The entity must review and evaluate its infection control program annually.
- IC 1.3 Infection control data must be analyzed at least quarterly.

Communication (CC)

CC 1.0 Communication

Standard: The facility shall have systems in place to assure timely and accurate communication of results.

Elements of Compliance:

- CC 1.1 Procedures for reporting must follow the ACR Practice Guideline for Communication of Diagnostic Imaging Findings.
- CC 1.2 The facility must have defined goals and procedures for inter-specialty communication and collaboration.
- CC 1.3 The facility shall assign a radiologist responsible to provide consultation to other physician for appropriate image ordering during working hours of respective operations.
- CC 1.4 The facility must have a system to accomplish the delivery of the report that reasonably ensures receipt. Images and reports should be available to referring providers 24/7.
- CC 1.5 The facility must have a policy that outlines procedures for handling nonroutine findings (critical tests results). The policy should specify

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standards or requirements for timing of communication, documentation, and monitoring of non-routine findings.

- CC 1.5.1 The facility must have a system for communication of nonroutine or unexpected findings (critical and significant).
- CC 1.5.2 A list of findings that constitute critical tests results must be available.

Utilization Review and Appropriateness of Services (UR)

UR 1.0 Utilization review and appropriateness of services

Standard: The entity should have in place a system to ensure appropriate utilization of services offered.

Elements of Compliance:

- UR 1.1 The entity provides patient education materials related to imaging appropriateness, such as Image Gently materials.
- UR 1.2 The entity will verify whether the patient had prior imaging studies of the same anatomic area and consult with the referring provider regarding the most appropriate course of action.
- UR 1.3 The entity should provide consultative services to ordering/referring providers to assist in determination of the most appropriate exam(s) as necessary or appropriate. There should be a process to ensure exam indications, advantages-benefits and limitation-risks are readily available to the referring provider. Information on radiation exposure/risk is essential.
- UR 1.4 The entity should have a written policy and procedure for verifying that orders contain enough standardized information about modality, body region, contrast, clinical indication, medications, etc.
- UR 1.5 The entity has policies for use of specific protocols aimed at reducing unwarranted, inappropriate procedures (e.g. routine use of combined without and with contrast studies).

Emergency Services (ES)

ES 1.0 Emergency services

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Standard: If the facility provides emergency services, diagnostic imaging services should be organized and integrated with the emergency department under the direction of the radiology department head.

Elements of Compliance:

- ES 1.0 The facility should have a documented policy for providing ED imaging services including adequate radiology staffing/coverage, both physicians and technologists.
- ES 1.1 The facility should have a documented policy for the monitoring of unstable patients in the diagnostic imaging area.
- ES 1.2 Emergency department imaging should have a policy for transfer of images and diagnostic imaging reports done within the ED.

Supplement S.1 DICOE General Recommendation

As a Diagnostic Imaging Center of Excellence (DICOE)designated facility you are expected to meet minimum requirements of ACR modality accreditation. However, our goal is to raise the importance of adopting work practices that lead to a value-based service for the patient using technology in a cost-effective manner. This goal requires a cultural change in which all departmental workers assume responsibility for quality and safety improvement.

In this section we are noting some of the most identified recommendations by the DICOE surveyors.

- 1. Use of structured terminology
- 2. Use of structured reporting
- 3. Documented disaster recovery procedure for image archive
- 4. Facility should have mechanism for secure image sharing over the internet
- 5. Facility should have ability to import images into their PACS
- 6. Structured audit to enforce privacy and confidentiality
- 7. Documented meeting minutes for CT protocol committee
- 8. Based on location and service areas, document 'Gun Policy'
- 9. Semiannual ultrasound technologist QC testing
 - a. Physical inspection
 - b. Uniformity and artifact
 - c. Acquisition display

- 10. PET unit- Physicist test all items in TS PET/CT
- 11. General radiography and fluoroscopy
 - a. Physicist report should acceptable
 - b. Recommend each test formed should be contain measure data, action limits and pass/fail section
 - c. All preventative maintenance records documented
 - d. All deficiencies are reported and corrected
 - e. All units surveyed by medical physicist between 12 to 14 months
 - f. Routine radiography should include AEC testing, analysis of radiographic doses and comparison to DRLs.
 - g. Fluoroscopic testing can include image quality measure and a typical fluoroscopic dose rate, not just max rate.

S.2 Frequently Asked Questions (FAQ)

1. Does the facility have to provide all advanced imaging services to qualify as a Diagnostic Imaging Center of Excellence (DICOE) designated site?

No. However, the facilities that wish to apply for this designation must be accredited by the ACR in all modalities that they provide.

- 2. Does the application cost cover the onsite survey?
 - i. No. The application cost covers DICOE processing fee and supplies, including one custom plaque.
 - ii. After the survey, the facility is billed for the travel, room, and board expenses.
- 3. If our practice locations are in two different states, can we include these sites under one application?

No. We require a separate application per each state. However, a multisite discount will apply.

- 4. Is the process of DICOE renewal same as the initial application process Yes. The facility is required to complete the entire application as a renewal site.
- 5. What should we expect once the application is completed?

Once a payment is received; our team will verify, review, and reach out to schedule an onsite DICOE survey.

- 6. How does a facility prepare for an onsite survey?
 - i. Carefully read the DICOE Program Requirement document in its entirety.
 - ii. Carefully read the Quality Management section and adopt the steps to implement a comprehensive quality program.
 - iii. Recommend compiling a Quality Manual which might help store and review all related material in one file/ folder.
 - iv. Ensure all accredited modalities, routine x-ray units, including fluoroscopy equipment, have updated physicist review.
 - v. Review ACR accreditation site information to update personnel and equipment changes.
 - 7. What are the upcoming changes in eligibility criteria as of January 1, 2021?
 - i. Sites with CT service must participate in the ACR Dose Index Registry (DIR®) and select a second NRDR registry (see options below)
 - Sites without CT service must participate in General Radiology Improvement Database (GRID®) and select a second registry (see options below)
 - iii. See <u>NRDR Support Page</u> for further information.
 - iv. With more NRDR registries from which to choose for DICOE eligibility, sites can select those that best suit their business model. Per our current and future changes, DICOE sites can opt to participate in DIR and GRID registry.
- 8. Are there other changes in the program as of January 1, 2021?
 - i. The DICOE onsite survey will include survey of the routine x-ray equipment as well as fluoroscopy equipment.
 - ii. Our surveyors will be concentrating on the equipment maintenance, radiation safety policies and procedures as well as documentation of fluoroscopy dose.
- 9. What type of documentation do you require for NRDR registries?

Our surveyors will require to see last two reports used by the facility.

10. Are we required to maintain a Quality Manual?

Yes. Although, it is not required to have the official title of quality manual. Please review section QM 2.1 for details.

11. What is a statement of Quality Policy?

It is a document developed by management and quality manager(s) to express organization's quality objectives. This policy can define goals to express acceptable level of quality for the organization and to outline the standards applicable to your department.

- 12. What type of quality improvement projects are acceptable?
 - i. Quality improvement projects can be small or presented as part of your organizational goal. These projects can be based on the collected data (For example, see section QM 4.4).
 - ii. All quality and patient experience improvement changes can be included in this section. These projects must be documented and periodically reviewed by a quality manager.
 - iii. Facility can use Dose Index Registry (DIR) and General Radiography Improvement Data (GRID) as a basis to define their improvement goals. For example, a DIR report prompted changes in the CT protocols and reduced dose or improved image quality. These changes should be documented and reflect in the CT protocol committee meeting minutes.
 - iv. Our surveyors look for staff involvement in these quality improvement projects.

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MR Safe Practice

ACR GUIDANCE DOCUMENT ON MR SAFE PRACTICES

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MRAP Requirement www.acr.org/MRAPInfo

CTAP Requirement

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AAPM Shield

USE OF PATIENT GONADAL AND FETAL SHIELDING https://www.aapm.org/org/policies/details.asp?id=468&type=PP¤t=true