

DICOE Program Requirements



Revisions.....	3
Introduction.....	4
Eligibility Criteria.....	4
Survey process	4
Structure of the Diagnostic Imaging Facility.....	5
Governance (GM).....	5
Personnel (SF)	5
Facility Organization and Management	6
Physical Environment (PE)	7
Radiation and General Safety (RS).....	7
Quality Management (QM).....	10
QM 1.0 Quality Management System	10
QM 2.0 Quality Outline.....	11
QM 3.0 Quality Manager.....	11
QM 4.0 Measurement, Evaluation and Analysis.....	11
QM 5.0 Patient Safety System.....	12
Patient Rights (PR)	13
PR 1.0 Patient Confidentiality	13
PR 2.0 Physical Privacy.....	13
PR 3.0 Patient Complaint Process	14
PR 4.0 Informed Consent	14
Medical Records (MR)	15
MR 1.0 Medical Records Maintenance, Storage and Handling	15
MR 2.0 Confidentiality of Medical Records	15
MR 3.0 Medical Record Completeness.....	15

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Infection Control (IC)	16
IC 1.0 Infection Control.....	16
Communication (CC).....	17
CC 1.0 Communication	17
Utilization Review and Appropriateness of Services (UR)	17
UR 1.0 Utilization review and appropriateness of services.....	18
Emergency Services (ES)	18
ES 1.0 Emergency services	18

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Revisions

Date	Page Number	Description of Revisions
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.

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Introduction

The American College of Radiology (ACR) accreditation programs for diagnostic imaging are modality based. They 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. These evaluations focus on the process of delivering diagnostic imaging care. The Diagnostic Imaging Centers of Excellence (DICOE) program takes accreditation to the next level by providing a comprehensive assessment of the entire medical imaging enterprise including structure and outcomes.

Eligibility Criteria

Diagnostic imaging facilities that wish to apply for this program must first be accredited by the ACR in all modalities that they provide. They must also participate in the ACR General Radiology Improvement Database (GRID) and the Dose Index Registry (DIR). 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 free-standing imaging center will receive a designation of a Diagnostic Imaging Center of Excellence based on participation in ACR accreditation programs for all modalities offered and participation in GRID and the Dose Index 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

If a practice has multiple sites the main site will be surveyed along with 1 or 2 of the satellite sites.

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

Structure of the Diagnostic Imaging Facility

Governance (GM)

GM 1.0 Governing Body

Standard: There is an overarching group or body that 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.

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.

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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 and be certified by 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 certification 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.

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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 should ensure that there is at least one Advanced Cardiovascular Life Support (ACLS) certified individual in the department when cardiac imaging is performed. An Advanced Radiology Life Support (ARLS) certified individual would be acceptable for sites that perform contrast studies.

FO 1.5 If interventional procedures are performed there must be a policy on how to admit a patient if complications arise.

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 work flow. 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)

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.

EQ 1.2 All equipment must have documented routine preventive maintenance, quality control records, and an annual medical physicist survey. For ultrasound a semi-annual survey by a medical physicist or service engineer is acceptable. The facility must allow the QC technologist sufficient time to perform routine QC and any necessary corrective action.

Radiation and General Safety (RS)

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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.

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 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 areas.

1.3.1 For MRI, Zone III* regions should be physically restricted from general 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.

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 http://www.acr.org/SecondaryMainMenuCategories/quality_safety/MRSafety/safe_mr07.aspx

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 Female diagnostic imaging patient of menstrual age (typically ages 12 through 50 years) must be questioned about pregnancy if there is a radiation risk. 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, as long as the beam is 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 [with the possible exception of 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 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 Iso/ Low-osmolality contrast media (LOCM) must be used.

RS 1.12 A physician must be on-site at all times when contrast is administered.

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.

RS 1.15 All sites must be in compliance with the current recommendations of the ACR Guidance Document for Safe MR Practice.

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, life support equipment appropriate to the patient population served must be available.

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.

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 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 Statement of Quality Policy
- 2.1.2 Measurable Quality Objectives
- 2.1.3 Goal Measurement/Prioritization of activities

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.

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

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- 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
- 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:

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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

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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:

4.2.1 high-risk procedures

- 4.2.2 procedures requiring sedation
- 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.

MR 3.0 Medical Record Completeness

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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 Radiology reports contained in the medical record should be signed by the interpreting physician.

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 1.1.3 A clean physical environment, including but not limited to, the clinical area, radiology equipment and devices must be maintained at all times.

IC 1.1.4 The appropriate disinfectants, antiseptics and germicides must be appropriately used for the cleaning and disinfecting of all radiology equipment and devices.

IC 1.1.5 Personnel must use appropriate personal protective equipment (e.g. gowns, masks, gloves, goggles) for contact with patients with known or suspected infection.

IC 1.1.6 Adherence to CDC and other nationally recognized, evidence-based 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 be in compliance with 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 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 1.4 The facility must have a policy that outlines procedures for handling non-routine findings (critical tests results). The policy should specify standards or requirements for timing of communication, documentation and monitoring of non-routine findings.

CC 1.4.1 The facility must have a system for communication of non-routine or unexpected findings (critical and significant).

CC 1.4.2 A list of findings that constitute critical tests results must be available.

Utilization Review and Appropriateness of Services (UR)

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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

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.