



## ACR POSITION STATEMENT ON

### Quality Control and Improvement, Safety, Infection Control, and Patient Education (ACR Resolution 9, 1998 – revised in 2008, Resolution 1e)

The American College of Radiology (ACR) continually promotes among its membership high regard for issues of quality and safety in radiologic procedures as they relate to the patients receiving the services, the personnel providing those services, and the equipment used to perform them as well as the education of patients regarding these matters. The statements that follow have been developed in support of that philosophy.

#### Equipment Quality Control

##### Ionizing Radiation

Each imaging facility should have documented policies and procedures for monitoring and evaluating the effective management, safety, and operation of equipment involved in the use of ionizing radiation for therapy, diagnosis and imaging. The quality control program should be designed to minimize patient, personnel, and public radiation risks and to maximize the quality of the diagnostic information or therapeutic benefit.

Equipment performance should be monitored and estimates of typical patient dose should be made by a qualified medical physicist as described in the appropriate ACR Technical Standard for physics equipment performance monitoring. Routine quality control testing should be conducted by properly trained individuals with review at least annually by the supervising physician and qualified medical physicist as described in the appropriate ACR Technical Standard for physics equipment performance monitoring.

##### Magnetic Resonance Imaging

Each facility should have documented policies and procedures for monitoring and evaluating the effective management, safety, and proper performance of magnetic resonance imaging equipment. Equipment performance should be monitored by a qualified medical physicist or a qualified MR Scientist as described in the ACR Technical Standard for Diagnostic Medical Physics Performance Monitoring of Magnetic Resonance Imaging (MRI) Equipment. A documented quality control program shall be maintained at the MR site. Routine quality control testing should be conducted by properly trained individuals with review at least annually by the supervising physician and qualified medical physicist as described in the ACR Technical Standard for Diagnostic Medical Physics Monitoring of Magnetic Resonance Imaging (MRI) Equipment.

##### Ultrasound

Each facility should have documented policies and procedures for monitoring and evaluating the effective management, safety, and proper performance of ultrasound imaging equipment. Equipment performance should be monitored by properly trained individuals under the supervision of a qualified medical physicist as described in the ACR Technical Standard for Diagnostic Medical Physics Performance Monitoring of Real Time Ultrasound Equipment. The quality control program should be designed to maximize the quality of the diagnostic information. Routine quality control testing should be conducted by properly trained individuals with review at least annually by the supervising physician and qualified medical physicist as described in the ACR Technical Standard for Diagnostic Medical Physics Monitoring of Real Time Ultrasound Equipment.

## **Infection Control**

Each facility should have policies and procedures in place to control the spread of infection among patients and personnel. These should include adherence to universal precautions and the use of clean or aseptic techniques as warranted by the procedure or intervention being performed.

## **Safety**

Each facility should have in place policies and procedures to provide for the safety of patients and personnel. These should include attention to the physical environment; the proper use, storage, and disposal of medications and hazardous materials and their attendant equipment; and methods for addressing medical and other emergencies.

## **Patient Education**

Each facility should have in place policies and procedures for educating and informing patients about procedures and/or interventions to be performed and facility processes for the same. This should include appropriate instructions for patient preparation and aftercare, if any. This information should be provided in an appropriate form to the patient and family, such as that provided on the ACR-RSNA website, [www.RadiologyInfo.org](http://www.RadiologyInfo.org).

## **Quality Improvement**

Examinations should be systematically reviewed and evaluated as part of the overall quality improvement program at the facility. Monitoring should include evaluation of the accuracy of interpretation as well as the appropriateness of the examination. Complications and adverse events or activities that may have the potential for sentinel events should be monitored, analyzed and reported as required, and periodically reviewed in order to identify opportunities to improve patient care. These data should be collected in a manner that complies with statutory and regulatory peer-review procedures in order to ensure the confidentiality of the peer-review process.