The American College of Radiology, with more than 30,000 members, is the principal organization of radiologists, radiation oncologists, and clinical medical physicists in the United States. The College is a nonprofit professional society whose primary purposes are to advance the science of radiology, improve radiologic services to the patient, study the socioeconomic aspects of the practice of radiology, and encourage continuing education for radiologists, radiation oncologists, medical physicists, and persons practicing in allied professional fields.

The American College of Radiology will periodically define new practice parameters and technical standards for radiologic practice to help advance the science of radiology and to improve the quality of service to patients throughout the United States. Existing practice parameters and technical standards will be reviewed for revision or renewal, as appropriate, on their fifth anniversary or sooner, if indicated.

Each practice parameter and technical standard, representing a policy statement by the College, has undergone a thorough consensus process in which it has been subjected to extensive review and approval. The practice parameters and technical standards recognize that the safe and effective use of diagnostic and therapeutic radiology requires specific training, skills, and techniques, as described in each document. Reproduction or modification of the published practice parameter and technical standard by those entities not providing these services is not authorized.

Revised 2013 (Resolution 24)*

ACR PRACTICE PARAMETER FOR RADIOLOGIST COVERAGE OF IMAGING PERFORMED IN HOSPITAL EMERGENCY DEPARTMENTS

PREAMBLE

This document is an educational tool designed to assist practitioners in providing appropriate radiologic care for patients. Practice Parameters and Technical Standards are not inflexible rules or requirements of practice and are not intended, nor should they be used, to establish a legal standard of care1. For these reasons and those set forth below, the American College of Radiology and our collaborating medical specialty societies caution against the use of these documents in litigation in which the clinical decisions of a practitioner are called into question.

The ultimate judgment regarding the propriety of any specific procedure or course of action must be made by the practitioner in light of all the circumstances presented. Thus, an approach that differs from the guidance in this document, standing alone, does not necessarily imply that the approach was below the standard of care. To the contrary, a conscientious practitioner may responsibly adopt a course of action different from that set forth in this document when, in the reasonable judgment of the practitioner, such course of action is indicated by the condition of the patient, limitations of available resources, or advances in knowledge or technology subsequent to publication of this document. However, a practitioner who employs an approach substantially different from the guidance in this document is advised to document in the patient record information sufficient to explain the approach taken.

The practice of medicine involves not only the science, but also the art of dealing with the prevention, diagnosis, alleviation, and treatment of disease. The variety and complexity of human conditions make it impossible to always reach the most appropriate diagnosis or to predict with certainty a particular response to treatment. Therefore, it should be recognized that adherence to the guidance in this document will not assure an accurate diagnosis or a successful outcome. All that should be expected is that the practitioner will follow a reasonable course of action based on current knowledge, available resources, and the needs of the patient to deliver effective and safe medical care. The sole purpose of this document is to assist practitioners in achieving this objective.

1 Iowa Medical Society and Iowa Society of Anesthesiologists v. Iowa Board of Nursing, N.W.2d, (Iowa 2013) Iowa Supreme Court refuses to find that the ACR Technical Standard for Management of the Use of Radiation in Fluoroscopic Procedures (Revised 2008) sets a national standard for who may perform fluoroscopic procedures in light of the standard’s stated purpose that ACR standards are educational tools and not intended to establish a legal standard of care. See also, Stanley v. McCarver, 63 P.3d 1076 (Ariz. App. 2003) where in a concurring opinion the Court stated that “published standards or guidelines of specialty medical organizations are useful in determining the duty owed or the standard of care applicable in a given situation” even though ACR standards themselves do not establish the standard of care.
I. INTRODUCTION

It is the policy of the American College of Radiology (ACR) that radiologists provide comprehensive imaging services to patients seen in the emergency department and provide timely consultative services for a patient’s physician [1-5]. The services of the radiologist in the emergency setting include, but are not limited to, the design and standardization of safe and effective radiological procedures; continuing supervision of technical performance and quality control of imaging; and, most importantly, interpretation of examinations, reporting of the results, and appropriate consultation with the referring physicians [6].

The timely interpretation of imaging examinations by qualified radiologists performed on emergency department (ED) patients facilitates decisions regarding their treatment and possible hospital admission. During normal working hours radiologists are available to interpret imaging examinations (either hardcopy or softcopy) performed on ED patients within a reasonable time after such examinations are processed. These interpretations are then made available to the ED physician promptly so they may be integrated into patient care decisions. Communication of the interpretation should be in accordance with the ACR Practice Parameter for Communication of Diagnostic Imaging Findings.

Many radiology practices provide similar timely interpretations for ED imaging examinations after normal working hours and on weekends and holidays by scheduling coverage by qualified radiologists on site and/or via teleradiology. However, coverage varies significantly among hospitals depending on local factors, including availability of resources.

Challenges arise inherent to radiology departments’ transition from hard-copy film and faxed reports to soft-copy PACS (picture archiving and communication system) and e-notification, and each institution should be prepared to re-examine its policies and procedures in light of local technological and institutional capabilities [7-9].

II. QUALIFICATIONS OF THE RADIOLOGIST

The radiologist shall meet the qualifications stated in the ACR practice parameter or technical standard for the particular procedure or examination being performed or interpreted.

III. RECOMMENDED COVERAGE

A. Coverage requirements are subject to state and federal statutes. Timely coverage of imaging examinations for ED patients can be accomplished in one of the following ways [10]:

1. A qualified radiologist is available to interpret imaging studies in accordance with criteria determined by collaboration between the radiology department, the ED, and the medical staff of the hospital, depending on resources available in the geographic locality.
2. A qualified radiologist with an acceptable teleradiology link to the hospital is available (see the ACR–AAPM–SIIM Technical Standard for Electronic Practice of Medical Imaging).

If interpretation of imaging studies performed on ED patients is delegated to off-site radiologists, those radiologists should follow the guidance in the ACR–AAPM–SIIM Technical Standard for Electronic Practice of Medical Imaging and the ACR Position Statements on: a) Remote Interpretation of Radiological Images, b) Off-Site Radiology, and c) if applicable, the ACR Revised Statement on the Interpretation of Radiology Images Outside the United States [11,12].

B. Administration of intravascular contrast media for emergency contrast-enhanced imaging studies should be supervised by a qualified radiologist or his/her physician designee in accordance with the ACR–SPR Practice Parameter for the Use of Intravascular Contrast Media.
IV. EXAMINATION ACQUISITION AND INTERPRETATION:

A. Most ED patients will be evaluated via the well-established and monitored internal pathways of the ED facility and its parent institution. Increasingly, however, ED patients may present with relevant recently obtained imaging examinations performed at an outside facility or institution, whether as hard copy films or soft copy and digitally stored (CD-ROM) [9]. Processes should be developed to acquire, store, integrate, and retrieve these examinations, making them available for real-time review to avoid unnecessary examination duplication and its associated costs and additional radiation exposure to the patient [13]. It is preferred to have timely official reports accompany the examinations, although properly identified preliminary reports may suffice in urgent and emergent situations.

B. On occasion, patients may provide outside examinations without accompanying interpretations, or the ED physician may raise questions regarding an outside interpretation, and a second interpretation may be requested by the ED. An official policy for providing and integrating these interpretations should be developed, rather than automatically repeating the study [14,15] (see the ACR Practice Parameter for Communication of Diagnostic Imaging Findings).

V. PACS, PDAS², AND ELECTRONIC DATA DISPLAY

Increasingly, radiology departments and their parent institutions are transitioning from hard-copy film and faxed reports to soft-copy PACS and e-notification [16-18]. Each institution should be prepared to re-examine its policies and procedures in light of local technological and institutional capabilities.

Electronic display of images, their preliminary and final interpretations, receipt/review by the requesting health care provider, and maintenance of documentation pathways should meet the qualifications in the ACR–AAPM–SIIM Technical Standard for Electronic Practice of Medical Imaging.

VI. QUALITY IMPROVEMENT MECHANISM

Each facility should have documented policies and procedures as well as a defined mechanism for monitoring any preliminary imaging study review performed by an ED physician. A mechanism should be in place for tracking and recording discrepancies and errors in diagnosis as part of a quality improvement process [19-21].

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² Personal Digital Assistants
REFERENCES


*Practice parameters and technical standards are published annually with an effective date of October 1 in the year in which amended, revised, or approved by the ACR Council. For practice parameters and technical standards published before 1999, the effective date was January 1 following the year in which the practice parameter or technical standard was amended, revised, or approved by the ACR Council.

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