ACR PRACTICE PARAMETER FOR COMMUNICATION OF DIAGNOSTIC IMAGING FINDINGS

The American College of Radiology, with more than 40,000 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.

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 care[1]. 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 considering 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 variables such as the condition of the patient, limitations of available resources, or advances in knowledge or technology after publication of this document. However, a practitioner who employs an approach substantially different from the guidance in this document may consider documenting in the patient record information sufficient to explain the approach taken.

The practice of medicine involves the science, and 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 purpose of this document is to assist practitioners in achieving this objective.

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1 *Iowa Medical Society and Iowa Society of Anesthesiologists v. Iowa Board of Nursing, 831 N.W.2d 826 (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

Effective communication is a critical component of diagnostic imaging. Quality patient care can only be achieved when study results are conveyed in a timely fashion to the patient and to those responsible for treatment decisions. An effective method of communication should 1) promote optimal patient care and support the referring physician/health care provider in this endeavor, 2) be tailored to satisfy the need for timeliness, and 3) minimize the risk of communication errors.

Various factors and circumstances unique to a clinical scenario may influence the methods of communication between interpreting physicians and referring physicians/health care providers. Timely receipt of the report is

more important than the method of delivery.

Communication of information is only as effective as the system that conveys the information. There is a reciprocal duty of information exchange. The referring physician or other relevant health care provider also shares in the responsibility for obtaining results of imaging studies ordered and acting on them in an appropriate manner. Formulating an imaging interpretation requires the commitment and cooperation of administrators, referring physicians, interpreting physicians, and other health care providers. A request for imaging should include relevant clinical information, including pertinent signs and symptoms. In addition, including a specific question to be answered can be helpful. Such information helps tailor the most appropriate imaging study to the clinical scenario and enhances the clinical relevance of the report, thus promoting optimal patient care.

II. DIAGNOSTIC IMAGING REPORTS

An official interpretation (final report) by the interpreting physician must be generated and archived following any examination, procedure, or officially requested consultation regardless of the site of performance (hospital, imaging center, physician office, mobile unit, etc).

II. DIAGNOSTIC IMAGING REPORTS

A. Nonphysicians and Interpretation

Rendering interpretations of medical imaging studies (preliminary, final, or otherwise) is beyond the scope of practice and is not the intended role of nonphysician members of the healthcare team, including Non-Physician Radiology Practitioners (NPRPs), radiologic technologists, nurses, and others, but excluding physicians in training. Nonphysicians should not be permitted to render interpretations of medical imaging studies, whether under physician supervision or as an independent nonphysician healthcare provider. (ACR Resolution 16, adopted 2021)

An interpretation of an imaging procedure is the action of an individual and not defined by the location of their contributions in the report. Interpretations may appear anywhere in a radiology report or elsewhere in the medical record (eg, findings, impression, or otherwise). Nonphysician members of the healthcare team, including radiologic technologists, nurses and others, should not be involved in the interpretation of an imaging examination regardless of where their observations are located in the report or medical record.

An interpretation is not defined by the availability of a report to other healthcare providers, but rather by its content and the nature of intellectual activity which produced it. Specifically, reports and/or notes in the medical record in any stage of completion by a nonphysician when that nonphysician was not directly involved in the acquisition of the medical images being interpreted or procedure which was performed, may all be considered interpretations, depending on their content. Such a report or note is considered an interpretation whether it is a draft (available only to a radiologist), a preliminary report, a final report, or any other written form.

Nonphysicians such as NPRPs and radiologic technologists may provide observations to the radiologist regarding targeted real-time image acquisitions or invasive procedures in which they were involved. Examples include a technologist providing observations from real-time targeted ultrasound or fluoroscopic image acquisitions and an NPRP describing a needle procedure they performed. Observations from a nonphysician who acquired medical images should be provided to the radiologist in a draft form only and should be limited to observations made during the acquisition of images (such as a sonographer worksheet). Observations from a nonphysician who performed or assisted in an invasive procedure may be provided to the radiologist in any portion of the radiology report and/ or medical record, and may be in any stage of completion as permitted by local institutional policy. It is not appropriate for nonphysicians to routinely provide observations on imaging studies and/ or procedures when they were not directly involved in the performance of the procedure or acquisition of the images (eg, radiographs, mammography, CT scans, MRI scans, and nuclear imaging). (ACR Resolution 17, Adopted 2021)

II. DIAGNOSTIC IMAGING REPORTS

B. Components of the Report

The following is a suggested format for reporting:

1. Demographics

a. The facility or location where the study was performed
b. Name of patient, age or date of birth, sex assigned at birth and, when appropriate, gender
c. Name(s) of referring physician(s) or other health care provider(s). If the patient is self-referred (a patient who seeks medical care without referral from a physician/health care provider), that should be stated.
d. Name or type of examination
e. Date of the examination
f. Time of the examination, if relevant (eg, for patients who are likely to have more than one of a given examination per day)
g. Inclusion of the following additional items when applicable:
    i. Date and time of dictation
    ii. Date and time of transcription
    iii. Date and time report is finalized

2. Relevant clinical information
3. Body of the report
    a. Procedures and materials:
    The report should include a description of the studies and/or procedures performed and any contrast media and/or radiopharmaceuticals (including specific administered activities, concentration, volume, and route of administration, when applicable, if this information is not documented elsewhere in the electronic health record), medications, and catheters or devices used beyond those used for routine administration of contrast agents, if not recorded elsewhere. Any known significant patient reaction or complication should be recorded along with a description of any therapeutic interventions. If related instructions are given to the patient (and/or accompanying responsible parties), these should be documented.
    b. Findings:
    The report should use appropriate anatomic, pathologic, and radiologic terminology to describe the findings.
    c. Potential limitations:
    The report should, when appropriate, identify factors that may compromise the sensitivity and specificity of the examination.
    d. Clinical issues:
    The report should address or answer any specific clinical questions. If there are factors that prevent answering the clinical question, these should be stated.
    e. Comparison studies and reports:
    Comparison with relevant examinations and reports should be part of the radiologic consultation and report when appropriate and available.
4. Impression (conclusion or diagnosis)
    a. Unless the report is brief, each report should contain an "impression" or "conclusion."
    b. A specific diagnosis should be given when possible.
    c. A differential diagnosis should be rendered when appropriate.
    d. Follow-up or additional diagnostic studies to clarify or confirm the impression should be suggested when appropriate.
    e. Any known significant adverse event involving the patient that occurred in relation to performance of the study should be briefly noted in the impression.
5. Standardized computer-generated template reports
    a. Standardized computer-generated template reports may be used to fulfill or satisfy the above criteria.

II. DIAGNOSTIC IMAGING REPORTS

C. Principles of Reporting (Final Report)

1. The final report is the definitive documentation of the results of an imaging examination or procedure.
2. The final report should be proofread. Use of abbreviations or acronyms should be limited to avoid

ambiguity.

3. The final report should be completed in accordance with appropriate state and federal requirements. Electronic or rubber-stamp signature devices, instead of a written signature, are acceptable unless contrary to state law or facility policy, if access to such devices is secure.
4. The final report should be transmitted to the referring physician or health care provider in accordance with the appropriate state and federal requirements. The referring physician or other relevant health care provider also shares in the responsibility to obtain results of imaging studies ordered.
5. When feasible, a copy of the final report should accompany the transmittal of relevant images to other health care professionals when such images are requested.
6. A copy of the final report should be archived by the imaging facility as part of the patient's medical record and be retrievable for future reference. Retention and distribution of these records must be in accordance with state and federal regulations and facility policies. The final report and images should be available to the patient on request after obtaining appropriate consent by the patient or other legally authorized person acting on their behalf.

II. DIAGNOSTIC IMAGING REPORTS

D. Communications other than the final report

1. Preliminary Report

When needed, a preliminary report precedes the final report. It may be rendered for the purpose of directing immediate patient management or to meet the needs of a particular practice environment. It very likely will contain limited or incomplete information. It should not be expected to contain all the information subsequently found in the final report.

Preliminary reports may be communicated in writing, electronically, or verbally, and the method of communication should be documented. These preliminary communications should be reproduced into a permanent format as soon as practical and appropriately labeled as a preliminary report, distinct from the final report, and archived because clinical decisions may have been based on the preliminary report. The archived preliminary report should contain the name of the person or office that received the report, if applicable, and the date and time that the report was provided.

As soon as possible, a significant variation in findings and/or conclusions between the preliminary and final interpretations should be reported in a manner that reasonably ensures receipt by the referring or treating physician/health care provider, particularly when such changes may impact patient care. Documentation of communication of any discrepancy should be incorporated into the final report.

II. DIAGNOSTIC IMAGING REPORTS

D. Communications other than the final report

2. Nonroutine communications

Routine reporting of imaging findings is communicated through the usual channels established by the hospital or diagnostic imaging facility. However, in emergent or other nonroutine clinical situations, the interpreting physician should expedite the delivery of a diagnostic imaging report (preliminary or final) in a manner that reasonably ensures timely receipt of the findings. This communication will usually be to the referring physician/health care provider or their designee. When the referring physician/health care provider cannot be contacted expeditiously, it may be appropriate to convey results directly to the patient, depending on the nature of the imaging findings.

a. Situations that may warrant nonroutine communication include the following:
    i. Findings that suggest a need for immediate or urgent intervention:
    Generally, these cases may occur in the emergency and surgical departments or critical care units and may include such findings as pneumothorax, pneumoperitoneum, or a significantly misplaced line or tube and other urgent conditions that may be considered critical to patient

care.

ii. Findings that are discrepant with a preceding interpretation of the same examination and when failure to act may adversely affect patient health:
These cases may occur when the final interpretation is discrepant with a preliminary report or when significant discrepancies are encountered on subsequent review of a study after a final report has been submitted.

iii. Findings that the interpreting physician reasonably believes are significant and unexpected, may have a reasonable probability of impacting the patient's health, and may not require immediate attention but, if not acted on, may worsen over time and likely result in an adverse patient outcome.

b. Documentation of nonroutine communications
Interpreting physicians should document all nonroutine communications. Documentation is best placed in the radiology report or the patient's medical record but may be entered in a department log and/or personal log. Documentation preserves a history for the purpose of substantiating the transmission of certain findings or events. Inclusion of the date and time, method of communication, and the name of the person to whom the communication was delivered is an example of such documentation.

c. Methods of nonroutine communication
Communication methods are dynamic and varied. It is important that nonroutine communications be handled in a manner most likely to reach the attention of the treating or referring physician/health care provider in time to provide the most benefit to the patient. Communication by telephone or in person to the treating or referring physician or a responsible health care provider is appropriate and reasonably ensures receipt of the findings. This may be accomplished directly by the interpreting physician or, when judged appropriate, by the interpreting physician's designee. Electronic forms of communication are also an appropriate method to convey nonroutine communication as long as they provide documentation of receipt to demonstrate that the communication has been delivered and acknowledged.

II. DIAGNOSTIC IMAGING REPORTS

D. Communications other than the final report

3. Informal Communications

Occasionally, an interpreting physician may be asked to provide an interpretation that does not result in a "formal" report but is used to make treatment decisions. Such communications may take the form of a "curbside consult," a "wet reading," or an "informal opinion" that may occur during clinical conferences, interpretations while involved in other activities, or review of the study with the patient or patient's family. These circumstances may preclude immediate documentation and may occur in suboptimal viewing conditions without comparison studies and their accompanying reports or adequate patient history.

Informal communications carry inherent risk, and frequently the referring physician's/health care provider's documentation of the informal consultation may be the only written record of the communication. Interpreting physicians who provide consultations of this nature in the spirit of improving patient care are encouraged to document those interpretations. A system for reporting outside studies is encouraged.

III. SELF-REFERRED AND THIRD-PARTY-REFERRED PATIENTS

Most patients who have imaging procedures are referred by physicians or other health care professionals. Some patients, however, are self-referred, such as for mammography, or are referred by a third party, such as an insurer or employer.

A. Self-Referred Patients

Interpreting physicians should recognize that performing imaging studies on self-referred patients may

establish a doctor-patient relationship that includes responsibility for communicating the results of imaging studies directly to the patient and arranging for appropriate follow-up. It is recommended that radiologists providing imaging services for self-referred patients request such patients to identify a licensed provider to receive their imaging results and oversee any necessary follow-up care. Adopting and implementing protocols for referring patients with suspicious findings who have not identified a provider to receive imaging results may help facilitate appropriate follow-up.

B. Third-Party–Referred Patients

It is not unusual for patients to be referred for imaging studies by insurance companies, employers, federal benefits programs, and, in some instances, lawyers. In such cases, the reports of the studies are frequently communicated through the requesting entity to a licensed provider or directly to the third-party–designated licensed provider. The results of the examinations are then communicated to the patient either directly by the third party or by its designated licensed provider. Regardless of the source of the referral, the interpreting physician should make every possible effort to ensure communication of unexpected or serious findings to the patient. Therefore, in certain situations, it should be considered reasonable for the interpreting physician to communicate the findings directly to the patient.

IV. Communication Policies

If an imaging department has written a policy on communication, it can be an effective tool to promote patient care. The policy can provide guidance on the types of communications that are most critical, the individuals responsible for delivering and receiving communications, and the methods of communication that are most appropriate. To be effective, however, any written policy must be followed and shared with others within the institution in which the interpreting physicians provide their services.

As technology changes and new methods of communication evolve, interpreting physicians may wish to modify their actions to accommodate these changes, but they must also remain in compliance with federal, state, and local statutes and developing legal requirements. HIPAA states that patients have a right to access their personal health information (https://www.hhs.gov/sites/default/files/ocr/privacy/hipaa/understanding/special/healthit/eaccess.pdf). In recognition of this legal obligation and in the interest of added value and personalized medicine, the ACR recommends that all imaging reports be made readily available to the patient. This may be achieved in numerous ways. One such technique is the posting of patient imaging reports through the use of a Web-based portal. Any method used should consider the best interests of the patient and the professional relationship between the patient and the referring physician/health care provider. Any Web-based portal must comply with federal, state, and, as appropriate, with hospital directives ensuring patient information integrity and security. Any known or suspected breach in the portal should be immediately reported to the appropriate agencies and patients involved.

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ADDITIONAL RESOURCES

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Pertinent Legal Cases Involving Communication:
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Stanley v. McCarver, 92 P.2d 849 (Ariz. 2004)
Diaz v. New York Downtown Hospital, 784 N.E.2d 68 (N.Y. 2002)

Reed v. Bojarski, 764 A.2d 433 (N.J. 2001)
Revised 2025 (Resolution 9)
Duckworth v. Lutheran Medical Center, 1995 WL 33070 (Ohio App. 1995)
Daly v. United States, 946 F.2d 1467 (9th Cir. 1991)
Courteau v. Dodd, 773 S.W.2d 436 (Ark. 1989)
Jenoff v. Gleason, 521 A.2d 1323 (N.J. App. 1987)
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*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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