

AIUM Practice Parameter for Documentation of an Ultrasound Examination

Introduction

Accurate and complete documentation and communication by all members of the diagnostic ultrasound health care team are essential for high-quality patient care. There must be a permanent record of the ultrasound examination and its interpretation. Images of all relevant areas defined in the particular parameter, both normal and abnormal, should be recorded and stored in a retrievable format (electronic preferred). Retention of the ultrasound images and report should be consistent both with clinical needs and with relevant legal and local health care facility requirements. Communication between the interpreting provider and the referring provider should be clear, timely, and in a manner that minimizes potential errors. In certain cases, the referring/ordering, performing, and interpreting physician may be the same person; if so, this should be documented. All communication should be performed in a manner that respects patient confidentiality and complies with relevant regulations. The reader is urged to refer to the applicable practice parameter for each type of ultrasound examination, as it may contain additional documentation requirements. Use of ultrasound without generating a separate report is not addressed in this document.

Requirements for the Ultrasound Examination

Ultrasound examinations should be recorded in a manner that will allow subsequent review for adequacy for diagnostic purposes. Although for some applications still-frame images may suffice, archiving of dynamic imaging (video/cine loop) may be required or preferred for some types of examinations (see relevant practice parameters).

Whether still-frame images or cine images (or both) are captured, the archived images should contain the following:

- Patient's name and other identifying information
- Facility's identifying information
- Date and time of the ultrasound examination
- Output display standard (thermal index and mechanical index)
- Label of the anatomic location and laterality, when appropriate
- Image orientation when appropriate

For digitally stored static or dynamic images, the information should be contained in the metadata and readable/displayable during review of the images. For analog records, identifiers should be contained on the image.

If a worksheet is used and retained, documentation on the worksheet should contain, at a minimum, the patient's name and other identifying information, date and time of the ultrasound examination, and name of the person(s) who performed the examination and completed the worksheet.

Final Report Provided by the Interpreting Provider

A signed final report of the ultrasound findings and impression should be included in the patient's medical record and is the definitive documentation of the study. The final report should include but is not limited to the following demographic components:

- Patient's name and other identifying information
- Name of the ordering provider
- Location of the ultrasound facility and contact information
- Relevant clinical information, including the indication for the examination and/or current version of the appropriate *International Classification of Diseases* code
- Date and time of the ultrasound examination
- Specific ultrasound examination performed
- If endocavitary techniques are used, the method should be specified

The body of the report should include a description of the examination, including the following components:

- A description of the studies and/or procedures performed
- Comments on the components of the examination as outlined in the relevant practice parameter(s)
- A description of any contrast media and/or pharmaceuticals used (including route of administration and dose, when applicable)
 - Additional medications, catheters, or devices used should be indicated

- Any significant patient reaction or complication should be documented
- Anatomic measurements (eg, fetal biometry), as appropriate, and measurement of abnormal structures or organs, if taken
- A description of examination findings, using appropriate anatomic and ultrasound terminology (use of acronyms and abbreviations should be avoided)

The concluding statements or summary of the report should include these components:

- An impression, conclusion, or summary statement
- A specific diagnosis or differential diagnosis, if appropriate
- A recommendation for follow-up studies, if clinically applicable
- An accounting of any failure to include standard views or other necessary components (as listed in the appropriate practice parameter)
- If prior relevant imaging studies were reviewed, a statement of comparison should be included
- Details concerning any provider-to-provider communication in cases in which a delay in communication may have an adverse effect on the patient's outcome

The interpreting provider has the responsibility to make the report available to the ordering provider, and the ordering provider has a responsibility to review the final report. The imaging facility should archive a retrievable copy of the final report as part of the patient's medical record and ensure that the requesting provider has access to the final report or a copy of the report. Archiving methods and communication of reports and images must comply with local, state, and federal regulations.

Reporting of Nonroutine Results

In certain circumstances, such as cases in which immediate patient treatment is necessary or in keeping with expectations of a particular practice environment, a preliminary report of the ultrasound results may be provided to the patient's referring health care provider(s) before generation of the final report. This includes practice environments and situations in which the referring, performing, and interpreting

provider are the same person, such as in point-of-care ultrasound in which a preliminary impression is documented during the course of care.

The preliminary report must contain the patient's identifying information, requesting provider's information, interpreting provider's contact information, pertinent clinical information, date and time of the ultrasound examination, and specific ultrasound examination performed. The preliminary report contains limited information and may not contain all of the results that will subsequently be found in the final report.

Preliminary reports should be labeled as such and should be archived, since clinical decisions may have been made on the basis of a preliminary report. Any significant discrepancy between the preliminary report and final report should be communicated to the patient's provider and documented in the final report, including the date, time, and method of communication of the discrepancy and final impression.

If the interpreting provider believes that any delay in the results of the ultrasound examination would have an adverse effect on the patient's outcome, communication should occur directly between the interpreting provider and the patient's health care provider. Communication may be verbal or electronic, provided the means of conveyance complies with all applicable federal, state, and local privacy laws and provides acknowledgment that the communication was received. Communication should occur in a timely manner in accordance with the patient's clinical condition and the ultrasound findings, typically as soon as feasible after interpretation of the examination.

The facility's protocol should be followed to minimize potential communication errors. The final or addended report should include all of the elements noted in section III, as well as the date, time, and method used to directly communicate the findings to the patient's health care provider if significant communication occurred before the transmittal of the final report.

Documentation and Reporting of Ultrasound-Guided Procedures

Documentation of the informed consent communication between the provider and the patient concerning the procedure (including risks, benefits, and alternatives)

should be part of the medical record and performed in compliance with local standards and any applicable state and federal law. The Joint Commission (TJC) "Universal Protocol for the Prevention of Wrong Site, Wrong Procedure, and Wrong Person Surgery" must be followed. (http://www.jointcommission.org/standards_information/up.aspx)

Recorded images appropriate to the procedure performed should be archived in a retrievable format to allow for subsequent review as specified in section II above.

A signed final report of the ultrasound-guided procedure should be included in the patient's medical record and is the definitive documentation of the procedure. The final report should be generated, signed, and dated by the performing provider/interpreting physician in accordance with state and federal requirements. Final reports should be available within 24 hours of completion of the examination or, for nonemergency cases, by the next business day.

The final report must contain all components listed in section III, and the following information:

- Indication for ultrasound guidance
- Documentation of compliance with the above-referenced TJC universal protocol
- Clear documentation of the procedure site
- Description of the target and relevant associated structures, both normal and abnormal, if clinically applicable
- Description of the essential elements of the procedure
 - Approach
 - Needle/device type and gauge
 - Number of passes performed
 - Deviations from standard techniques should be described and justified
- Name(s) of medication(s) injected and amount(s) used, if applicable
- Specimen description, type, and amount removed, if any
- Complications (or lack thereof)
- Patient's response to the procedure and disposition
- Recommendations for follow-up imaging, if clinically indicated

Please refer to the relevant parameter for the specific ultrasound-guided procedure, as it may contain additional documentation requirements.

Acknowledgments

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