

Recommendations for a Standardized Report for Adult Perioperative Echocardiography

From the Society of Cardiovascular Anesthesiologists/American Society of
Echocardiography Task Force for a Standardized Perioperative
Echocardiography Report

Task Force Members

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Preamble

The Society of Cardiovascular Anesthesiologists and the American Society of
Echocardiography have published guidelines relating to the standards for training,
performance, nomenclature, and performance improvement related to echocardiography.

¹⁻¹⁶ Recently the American Society of Echocardiography has approved a standardized
report for adult transthoracic echocardiography. (17) The current report contains the
recommendations of anesthesiologists and cardiologists for the core variables of a
comprehensive perioperative echocardiography examination. This report will serve the
memberships of the societies and other practitioners in the following ways:

- Promote quality by defining the basic core of measurements and diagnostic statements required in a report.
- Facilitate the comparison of serial echocardiograms performed in patients at the same site or different sites.
- Improve communication by expediting development of structured report form software.
- Facilitate multicenter research and analyses of cost-effectiveness.
- Facilitate billing compliance and collections.

Report Format

Recognizing the unique environment of the operating room and the pressures of patient care, the task force created a sample one-page report designed to be filled-in by hand or computer (Word file). The report contains the following six sections: 1) Demographic and other Identifying Information, 2) Echocardiographic and Doppler Measurements, 3) Post Intervention Follow-up Study, 4) Comments, 5) Summary, and 6) Complications. These sections will be outlined briefly below. It is also recognized that this form can and should be customized to fit the specific needs of practitioners, including a computerized version.

Demographic and Other Identifying Information

The echocardiography report should include the following demographic and other identifying information: Patient's name and/or other unique identifier, age, gender, indication, and referring physician identification. Other identifying information, which may be helpful, include: echo machine identification (e.g., disk or tape number, etc), date and

time on which the study was performed, location, intubation, sedation, probe types, and imaging modalities. Billing information such as CPT codes and ICD-9 codes may also be included and appendices with examples of commonly used codes are attached.

Echocardiographic and Doppler Measurements

It is the strong recommendation of the Task Force that the comprehensive adult perioperative echocardiography examination include an evaluation of all cardiac chambers, valves, and the thoracic aorta. This evaluation must include an assessment of any abnormalities and the severity of these abnormalities. Although, quantitative measurements are preferable, qualitative or semi-quantitative assessments are often performed and frequently adequate. The data fields in this section of the report are meant to be summary fields and integrate the use of many measurements. For example, the grading of the severity of mitral regurgitation may be based on a combination of color flow, pulmonary vein, and PISA measurements. Similarly, valve area entries may represent pressure half-time measurements and or PISA based measurements. If the interpreter wants to include the underlying data, the comment section can be used.

Post Intervention Study

It is the strong recommendation of the Task Force that this section be carefully completed. Perioperative Echo is performed to direct surgical interventions and the result of the interventions needs to be documented.

Comments

This part of the report is included for any additional information that is not covered in the Measurements section.

Summary

A summary section for the echocardiographic report should include statements that: 1) List all significant pathologic echo diagnoses, 2) Answer the question(s) posed by the referring physician, 3) List other significant normal findings, 4) Note any significant acute intraoperative changes, and also note the post-intervention changes.

Complications

Though complications of perioperative echocardiography are rare, the Task Force strongly feels that a statement regarding complications is necessary.

Appendices

The first appendix lists commonly used CPT codes and Modifiers for Perioperative Echocardiography. Depending on the indications and the modalities employed, different codes are applicable. The second appendix lists sample ICD-9 codes which can be used with the most commonly used CPT code 93312, 2-D imaging of acquired adult heart disease. The third appendix includes the figures from reference 1, Shanewise et al, on wall

segment and mitral valve nomenclature.

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