SUBJECT: Ultrasound Diagnostic Procedures

I. SUMMARY OF CHANGES: Effective for claims with dates of service on and after May 17, 2007, CMS determines that esophageal Doppler monitoring of cardiac output for ventilated patients in the ICU and operative patients with a need for intra-operative fluid optimization is reasonable and necessary, and therefore removes the current national non-coverage of cardiac output Doppler monitoring. CMS amends the NCD Ultrasound Diagnostic Procedures at section 220.5, of the NCD Manual, by adding monitoring of cardiac output (Esophageal Doppler) for ventilated patients in the ICU and operative patients with a need for intra-operative fluid optimization to Category I, and deleting monitoring of cardiac output (Doppler) from Category II.

NEW / REVISED MATERIAL
EFFECTIVE DATE: MAY 17, 2007
IMPLEMENTATION DATE: September 28, 2007

Disclaimer for manual changes only: The revision date and transmittal number apply only to red italicized material. Any other material was previously published and remains unchanged. However, if this revision contains a table of contents, you will receive the new/revised information only, and not the entire table of contents.

II. CHANGES IN MANUAL INSTRUCTIONS: (N/A if manual is not updated)
R=REVISED, N=NEW, D=DELETED

<table>
<thead>
<tr>
<th>R/N/D</th>
<th>CHAPTER / SECTION / SUBSECTION / TITLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>R</td>
<td>1/Table of Contents</td>
</tr>
<tr>
<td>R</td>
<td>1/220.5/Ultrasound Diagnostic Procedures (Effective May 17, 2007)</td>
</tr>
</tbody>
</table>

III. FUNDING:

No additional funding will be provided by CMS; contractor activities are to be carried out within their FY 2007 operating budgets.

IV. ATTACHMENTS:

Business Requirements
Manual Instruction

*Unless otherwise specified, the effective date is the date of service.*
SUBJECT: Ultrasound Diagnostic Procedures

EFFECTIVE DATE: May 17, 2007
IMPLEMENTATION DATE: September 28, 2007

I. GENERAL INFORMATION

A. Background: Medicare has a longstanding national coverage determination (NCD) for ultrasound diagnostic procedures that provides for non-coverage of Doppler technology when utilized to monitor cardiac output. The Centers for Medicare & Medicaid Services (CMS) reconsidered its coverage policy to include esophageal Doppler monitoring for cardiac output in ventilated patients in the intensive care unit (ICU) and in operative patients with a need for intra-operative fluid optimization.

B. Policy: Effective for claims with dates of service on and after May 17, 2007, CMS determines that esophageal Doppler monitoring of cardiac output for ventilated patients in the ICU and operative patients with a need for intra-operative fluid optimization is reasonable and necessary. Therefore, we are amending the NCD for Ultrasound Diagnostic Procedures at section 220.5 of Pub. 100-03, of the NCD Manual, by adding “Monitoring of cardiac output (Esophageal Doppler) for ventilated patients in the ICU and operative patients with a need for intra-operative fluid optimization” to Category I (covered procedures), and deleting “Monitoring of cardiac output (Doppler)” from Category II (non-covered procedures).

II. BUSINESS REQUIREMENTS TABLE

Use “Shall” to denote a mandatory requirement

<table>
<thead>
<tr>
<th>Number</th>
<th>Requirement</th>
<th>Responsibility (place an “X” in each applicable column)</th>
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</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A/D/F/C/R/E/M/C/A/C/F/S/M/V/C/O</td>
</tr>
<tr>
<td>5608.1</td>
<td>Effective for claims with dates of service on and after May 17, 2007, CMS determines that esophageal Doppler monitoring of cardiac output for ventilated patients in the ICU and operative patients with a need for intra-operative fluid optimization is reasonable and necessary. Therefore, we are amending the NCD Ultrasound Diagnostic Procedures at section 220.5 of Pub. 100-03 of the NCD Manual by adding “Monitoring of cardiac output (Esophageal Doppler) for ventilated</td>
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</table>
patients in the ICU and operative patients with a need for intra-operative fluid optimization” to Category I (covered procedures), and deleting “Monitoring of cardiac output (Doppler)” from Category II (non-covered procedures).

<table>
<thead>
<tr>
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<th>Responsibility (place an “X” in each applicable column)</th>
</tr>
</thead>
<tbody>
<tr>
<td>5608.1.1</td>
<td>When performed in a hospital setting for ventilated patients in the ICU or for operative patients with a need for intra-operative fluid optimization, ultrasound diagnostic procedures professional services only are separately payable using code 76999 and shall be billed with modifier-26 (professional component).</td>
<td>X  X</td>
</tr>
<tr>
<td>5608.1.2</td>
<td>When performed in a hospital setting for ventilated patients in the ICU or for operative patients with a need for intra-operative fluid optimization, ultrasound diagnostic procedures globally billed using code 76999 shall be returned as unprocessable to the provider.</td>
<td>X  X</td>
</tr>
<tr>
<td>5608.1.2.1</td>
<td>Contractors shall use an appropriate reason code when returning a claim as unprocessable, such as M58: “Payment adjusted because treatment was deemed by the payer to have been rendered in an inappropriate or invalid place of service.”</td>
<td>X  X</td>
</tr>
<tr>
<td>5608.1.3</td>
<td>When performed in a hospital setting for ventilated patients in the ICU or for operative patients with a need for intra-operative fluid optimization, ultrasound diagnostic procedures technical services billed with code 76999-TC shall be denied.</td>
<td>X  X</td>
</tr>
<tr>
<td>5608.1.3.1</td>
<td>Contractors shall use appropriate messages, such as, the following messages when denying procedure code 76999-TC: MSN 17.9 “Medicare Part A pays for this service. The provider must bill the correct Medicare Contractor.” (English version) or “Este servicio es pagado por Medicare Parte A. El proveedor debe enviar la factura al</td>
<td>X  X</td>
</tr>
<tr>
<td>Number</td>
<td>Requirement</td>
<td>Responsibility (place an “X” in each applicable column)</td>
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<td>----------------------------------------------------------</td>
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<tr>
<td></td>
<td>contratista de Medicare correcto.” (Spanish version) Claim Adjustment Reason Code M58, “Payment adjusted because treatment was deemed by the payer to have been rendered in an appropriate or invalid place of service.” Remittance Advice Remark Code M77, “Missing/Incomplete/Invalid place of service.”</td>
<td>A/B/DM/EM/FICAREMDMRH/EDC/FS/MCM/VM/CM/OTHER</td>
</tr>
</tbody>
</table>

### III. PROVIDER EDUCATION TABLE

<table>
<thead>
<tr>
<th>Number</th>
<th>Requirement</th>
<th>Responsibility (place an “X” in each applicable column)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>A/DM/EM/FICAREMDMRH/EDC/FS/MCM/VM/CM/OTHER</td>
</tr>
</tbody>
</table>
A provider education article related to this instruction will be available at http://www.cms.hhs.gov/MLNMattersArticles/ shortly after the CR is released. You will receive notification of the article release via the established "MLN Matters" listserv. Contractors shall post this article, or a direct link to this article, on their Web site and include information about it in a listserv message within one week of the availability of the provider education article. In addition, the provider education article shall be included in your next regularly scheduled bulletin. Contractors are free to supplement MLN Matters articles with localized information that would benefit their provider community in billing and administering the Medicare program correctly.

IV. SUPPORTING INFORMATION

A. For any recommendations and supporting information associated with listed requirements, use the box below:
   *Use "Should" to denote a recommendation.*

<table>
<thead>
<tr>
<th>X-Ref Reference Number</th>
<th>Recommendations or other supporting information:</th>
</tr>
</thead>
<tbody>
<tr>
<td>5608.1.1</td>
<td>There is no specific CPT for this service. Code 76999 is for unlisted ultrasound procedures.</td>
</tr>
</tbody>
</table>

B. For all other recommendations and supporting information, use this space:

V. CONTACTS

**Pre-Implementation Contact(s):** Kimberly Long (coverage), 410-786-5702, Kimberly.long@cms.hhs.gov, Pat Brocato-Simons (coverage), 410-786-0261, patricia.brocatosimons@cms.hhs.gov, Tom Dorsey, professional claims, 410-786-7434, Thomas.dorsey@cms.hhs.gov

**Post-Implementation Contact(s):** Appropriate regional office

VI. FUNDING

**A. For Fiscal Intermediaries, Carriers, and the Durable Medical Equipment Regional Carrier (DMERC):**
No additional funding will be provided by CMS; contractor activities are to be carried out within their FY 2007 operating budgets.

B. For Medicare Administrative Contractors (MAC):

The contractor is hereby advised that this constitutes technical direction as defined in your contract. CMS does not construe this as a change to the Statement of Work (SOW). The contractor is not obligated to incur costs in excess of the amounts specified in your contract unless and until specifically authorized by the contracting officer. If the contractor considers anything provided, as described above, to be outside the current scope of work, the contractor shall withhold performance on the part(s) in question and immediately notify the contracting officer, in writing or by e-mail, and request formal directions regarding continued performance requirements.
Table of Contents
(Rev. 72, 08-28-07)

220.5 - Ultrasound Diagnostic Procedures (Effective May 17, 2007)
220.5 - Ultrasound Diagnostic Procedures *(Effective May 17, 2007)* *(Rev. 72; Issued: 08-28-07; Effective: 05-17-07; Implementation: 09-28-07)*

**A. General**

Ultrasound diagnostic procedures utilizing low energy sound waves are being widely employed to determine the composition and contours of nearly all body tissues except bone and air-filled spaces. This technique permits noninvasive visualization of even the deepest structures in the body. The use of the ultrasound technique is sufficiently developed that it can be considered essential to good patient care in diagnosing a wide variety of conditions.

Ultrasound diagnostic procedures are listed below and are divided into two categories. Medicare coverage is extended to the procedures listed in Category I. Periodic claims review by the intermediary’s medical consultants should be conducted to ensure that the techniques are medically appropriate and the general indications specified in these categories are met. Techniques in Category II are considered experimental and should not be covered at this time.

**B. Nationally Covered Indications**

Category I - (Clinically effective, usually part of initial patient evaluation, may be an adjunct to radiologic and nuclear medicine diagnostic technique)

- Echoencephalography, (Diencephalic Midline) (A-Mode)
- Echoencephalography, Complete (Diencephalic Midline and Ventricular Size)
- Ocular and Orbital Echography (A-Mode)
- Covered procedures include efforts to determine the suitability of aphakic patients for implantation of an artificial lens (pseudophakoi) following cataract surgery.
- Ocular and Orbital Sonography (B-Mode)
- Echocardiography, Pericardial Effusion (M-Mode)
- Pericardiocentesis, by Ultrasonic Guidance
- Echocardiography, Cardiac Valve(s) (M-Mode)
- Echocardiography, Complete (M-Mode)
- Echocardiography, limited (e.g., follow-up or limited study) (M-Mode)
- Pleural Effusion Echography
- Thoracentesis, by Ultrasonic Guidance
- Abdominal Sonography, complete survey study (B-Scan)
- Abdominal Sonography, limited (e.g., follow-up or limited study) (B-Scan)
- Abdominal Sonography is not synonymous with ultrasound examination of individual organs.
- Renal Cyst Aspiration, by Ultrasonic Guidance
- Renal Biopsy, by Ultrasonic Guidance
- Pancreas Sonography (B-Scan)
- Pancreatic Sonography has proven effective in diagnosing pseudocysts.
• Spleen Sonography (B-Scan)
• Abdominal Aorta Echography (A-Mode)
• Abdominal Aorta Sonography (B-Scan)
• Retroperitoneal Sonography (B-Scan)
• Retroperitoneal Sonography does not include planning of fields for radiation therapy.
• Urinary Bladder Sonography (B-Scan)
• Urinary bladder Sonography does not include staging of bladder tumors.
• Pregnancy Diagnosis Sonography (B-Scan)
• Fetal Age Determination (Biparietal Diameter) Sonography (B-Scan)
• Fetal Growth Rate Sonography (B-Scan)
• Placenta Localization Sonography (B-Scan)
• Pregnancy Sonography, Complete (B-Scan)
• Molar Pregnancy Diagnosis Sonography (B-Scan)
• Ectopic Pregnancy Diagnosis Sonography (B-Scan)
• Passive Testing (Antepartum Monitoring of Fetal Heart Rate In the Resting Fetus)
• Intrauterine Contraceptive Device Sonography (B-Scan)
• Pelvic Mass Diagnosis Sonography (B-Scan)
• Amniocentesis, by Ultrasonic Guidance
• Arterial Flow Study, Peripheral (Doppler)
• Venous Flow Study, Peripheral (Doppler)
• Arterial Aneurysm, Peripheral (B-Scan)
• Radiation Therapy Planning Sonography (B-Scan)
• Thyroid Echography (A-Mode)
• Thyroid Sonography (B-Scan)
• Breast Echography (A-Mode)
• Breast Sonography (B-Scan)
• Hepatic Sonography (B-Scan)
• Gallbladder Sonography
• Renal Sonography
• Two-Dimensional Echocardiography (B-Mode)
• Monitoring of cardiac output (Esophageal Doppler) for ventilated patients in the ICU and operative patients with a need for intra-operative fluid optimization

C. Nationally Non-Covered Indications

Category II - (Clinical reliability and efficacy not proven)

• B-Scan for atherosclerotic narrowing of peripheral arteries.

D. Other

Uses for ultrasound diagnostic procedures not listed in Category I or II above are left to local contractor discretion. In view of the rapid changes in the field of ultrasound diagnosis, uses for ultrasound diagnostic procedures other than those listed under
Categories I and II should be carefully reviewed before payment. Medical justification may be required.

(This NCD last reviewed June 2007.)

Cross reference: §20.17