

OHCA Guidelines

Medical Procedure:	* Transthoracic Echocardiogram (Echo) Adult
Implementation Date:	August 8, 2017
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* This document is not a contract, and these guidelines do not reflect or represent every conceived situation. Although all items contained in these guidelines may be met, this does not reflect, or imply, any responsibility of this agency or department to change the plan provision to include the stated service as an eligible benefit.	

New Criteria

Revision of Existing Criteria

Summary

Purpose: To provide guidelines to assure medical necessity and consistency in the prior authorization process.

Definitions:

Congenital Heart Defect - an abnormality present at birth. Most congenital heart defects are diagnosed during childhood, but sometimes a person may reach adulthood before discovering a heart defect.

Echocardiogram - a diagnostic test that uses ultrasound waves to create an image of the heart anatomy and blood flow. Ultrasound waves that rebound or echo off the heart can show the size, shape, and movement of the heart's valves and chambers as well as the flow of blood through the heart.

Transthoracic Echocardiogram (TTE) - used to evaluate structural heart disease, ventricular function and valve function. In children and small adults TTE provides accurate anatomic definition of most congenital heart diseases. TTE is the most common type of echo performed.

CPT Codes Covered: 93303, 93304, 93306, 93307, 93308 (see CPT Manual for definition of codes)

Non Covered Items: OHCA does not cover echocardiograms performed for screening purposes only.

Approval Criteria:

I. GENERAL

- A. Medical Necessity must be met. All documentation submitted to request services or substantiate previously provided services must demonstrate, through adequate medical records, evidence sufficient to justify the member's needs for the service in accordance with the **OAC 317:30-3-1(f)**.
- B. For this guideline, the adult population is defined as 21 or older at the time of the

echo.

II. DOCUMENTATION REQUIRED FOR ALL ADULT ECHO REQUESTS

- A. Clinical documentation from the ordering provider that clearly supports the following:
 - a. Information suggesting a new disease/defect for which an echo is needed to make or confirm a diagnosis, **OR**
 - b. Follow-up for progression of a previously confirmed diagnosis that is known to clinically progress (see criteria below for repeat imaging), **OR**
 - c. A change in clinical status, other than an expected progression, in a previously diagnosed disease/defect where an echo is necessary to determine management changes, **OR**
 - d. A change in clinical management, medical or surgical, of a previously diagnosed disease/defect which necessitates an echo to assess efficacy of the change in management.
- B. When an echo is requested to evaluate a congenital defect, it must be "linked" to an ICD-10 diagnosis code that is congenital **AND** the clinical documentation must support the clinical diagnosis.

III. INDICATIONS FOR AN INITIAL ECHO (THIS IS A PARTIAL LISTING AND IS NOT CONSIDERED ALL INCLUSIVE)

- A. New onset signs and/or symptoms suggesting cardiac etiology including but not limited to chest pain, shortness of breath, palpitations, TIA, stroke, or embolic event where echo is necessary to diagnose or evaluate condition; **OR**
- B. Prior imaging or testing that is suggestive of heart disease or structural abnormality, including but not limited to chest X-ray, baseline scout images for stress echocardiogram, ECG; or cardiac biomarkers where echo is necessary to diagnose or evaluate the condition; **OR**
- C. Frequent ventricular premature contractions (VPCs) or exercise-induced VPCs; **OR**
- D. Sustained or non-sustained atrial fibrillation, supra-ventricular tachycardia (SVT), or ventricular tachycardia (VT); **OR**
- E. Clinical documentation of a heart murmur; **OR**
- F. Clinical documentation of sickle cell anemia (for requests beyond the initial; refer to pulmonary hypertension under section IV); **OR**
- G. Clinical symptoms or signs consistent with a cardiac diagnosis known to cause lightheadedness/pre-syncope/syncope (including but not limited to aortic stenosis, hypertrophic cardiomyopathy, or heart failure); **OR**
- H. Syncope when there are no other symptoms or signs of cardiovascular disease; **OR**
- I. Evaluation of suspected pulmonary hypertension including evaluation of right ventricular function and estimated pulmonary artery pressure; **OR**
- J. Clinical situation where possible vegetation in the heart must be evaluated; **OR**
- K. Evaluation of both global ventricular function and segmental wall motion in the setting of coronary artery disease (CAD), or acute cardiac syndrome (ACS), and/or evaluation of ejection fraction (EF), for example:
 - a. Cardiomyopathy
 - b. Chemotherapy where cardio-toxic agents have been used (agent must be identified).
 - c. Arrhythmias where cardiomyopathy or valve disorder may be the cause
 - d. Ventricular structural abnormality including but not limited to:
 - 1. Infiltrative cardiac diseases
 - 2. Ventricular septal defect (VSD)

- 3. Papillary muscle rupture/dysfunction
- 4. Hypertrophy (includes asymmetric septal hypertrophy, hypertensive concentric hypertrophy); **OR**
- L. Aortic arch dilation/aneurysm with or without thrombus and thoracic aortic aneurysm with or without thrombus; **OR**
- M. Evaluation of atrial or ventricular chamber size; **OR**
- N. Cardiac defects or masses, for example:
 - a. ASD repair or VSD repair: must be within first year of surgery or noted to have new symptoms relating to defect and/or repair.
 - b. Tumor evaluation including myxomas
 - c. Clot detection
 - d. Clinical suspicion of vegetation; **OR**
- O. Evaluation of inflammatory process, for example:
 - a. Pericardial effusion/pericardial disease including pericardial cysts
 - b. Endocarditis (suggested by fever, positive blood cultures indicating bacteremia, or a new murmur); **OR**
- P. Pacemaker insertion with noted complications; **OR**
- Q. Clinical suggestion of peri-partum cardiomyopathy during the period of third trimester to 6 months post-partum supported by evidence of failure or arrhythmia.
- R. Clinical presentation suggesting genetic connective tissue disorders such as Marfan's syndrome, Ehlers-Danlos syndrome, Familial Thoracic Aortic Aneurysm and Dissection, with or without documented family history; **OR**
- S. Evaluation for liver transplantation; **OR**
- T. At onset of Herceptin or anthracycline chemotherapy treatment; **OR**
- U. Family history of a first degree relative (i.e. biological parent, full sibling, child) having bicuspid aortic valve (BAV) disorder, having a cardiomyopathy or having experienced sudden death related to a cardiac anomaly.

IV. INDICATION FOR REPEAT ECHO

- A. With a diagnosis of a congenital cardiac defect when experiencing a clinical status change; **OR**
- B. An annual re-evaluation to guide therapy in the adult congenital cardiac defect; **OR**
- C. Routine surveillance of adult congenital cardiac defect/disease following an incomplete or palliative repair. A maximum frequency of **ONCE** per year if both of the following are present:
 - a. A residual structural or hemodynamic abnormality **AND**
 - b. No reported change in the clinical status or the cardiac exam; **OR**
- D. Routine surveillance of adult with congenital cardiac defect following a complete surgical repair when there is no reported residual structural or hemodynamic abnormality other than that due to the expected complete and successful surgical repair with no documented change in clinical status on cardiac exam, at a maximum frequency of **ONCE every TWO years; OR**
- E. Pre- and postoperative congenital heart disease assessment; **OR**
- F. With diagnosis of Kawasaki disease, an echo is indicated at initial diagnosis; at two weeks post-diagnosis; and at four weeks post-diagnosis. If a coronary abnormality is present, additional imaging may be requested by submitting clinical documentation which supports the requested service **AND** supports the medical necessity of the request; **OR**
- G. When surgery is under consideration for correction of a progressive heart defect/disease, an echocardiogram is allowed twice yearly to follow the progression. A post-operative echocardiogram and one three years post-operative are allowed;

OR

- H. Imaging may be approved when there is documented evidence of a clinical status change, to assess a new or changing intervention (medical or surgical) where an echo is necessary to evaluate the efficacy of the change; **OR**
- I. Surveillance of a disease/defect, previously diagnosed, that is known to progress, but has not shown a change in the clinical condition or a change in the management (no more than once every 12 months is allowed); **OR**
- J. After initial diagnosis of pulmonary hypertension an annual surveillance is considered medically necessary if there is no change in the clinical status; **OR**
- K. Pulmonary hypertension with a significant change in clinical presentation which is detrimental to the condition of the member **AND** is noted within the clinical documentation; **OR**
- L. Pulmonary hypertension in which a change in clinical management is made and an echo is medically necessary to evaluate the efficacy of the changes; **OR**
- M. Three months after onset of clinical treatment of hypertension, may repeat in an additional six months if abnormality relating to hypertension is demonstrated on the three month echo; **OR**
- N. After diagnosis of a genetic connective tissue disorders such as Marfan's syndrome, Ehlers-Danlos syndrome, Familial Thoracic Aortic Aneurysm and Dissection, annual echocardiogram to follow for any progression; **OR**
- O. During Herceptin chemotherapy as follows:
 - a. Every three months while in treatment (standard course is 52 wks.); **AND**
 - b. Every six months for at least two years once treatment is completed (for requests > two years, pend to physician); **OR**
 - c. Every four weeks if treatment is withheld due to cardiac dysfunction not to exceed a period of 8 weeks (two echocardiograms) as, if dysfunction continues at 8 weeks, treatment is stopped; **OR**
- P. History of anthracycline chemotherapy an echo is allowed at 2 years, 5 years post and 15 years post treatment.

V. EXAMPLES OF INITIAL OR FOLLOW-UP ECHOS THAT ARE NOT INDICATED

- A. Clinical documentation does not include the need of an echo.
- B. Clinical documentation does not include any cardiac issues.
- C. Repeat echocardiographic imaging IS NOT indicated when clinical status is stable. Examples may include but are not limited to:
 - a. Stable valvular cardiac disease
 - b. Presence of a prosthetic valve
 - c. Stable cardiomyopathy
 - d. Stable hypertension

Denial Criteria: Request outside the guidelines.

References:

1. Oklahoma Health Care Authority; Policies & Rules, OAC 317: 30-3-1; 317:30-3-65.5; 317:30-5, Part 17.
2. http://www.heart.org/HEARTORG/Conditions/HeartAttack/SymptomsDiagnosisofHeartAttack/Echocardiogram---Echo_UCM_451485_Article.jsp#.WNwa7OmguM8
3. http://www.onlinejacc.org/content/67/5/512?_ga=1.15552950.1898189534.1490885339
4. <http://circ.ahajournals.org/content/118/23/2395>
5. <http://asecho.org/wordpress/wp-content/uploads/2017/02/Stress-Echo-in-Non-Ischaemic-Guideline-2-2-17.pdf>

6. http://www.medsolutions.com/documents/guidelines/guideline_downloads/CARDIAC%20MAGING%20GUIDELINES.pdf
7. <https://www.uhcrivervalley.com/Preauthorization/Diagnostic.html>
8. <https://services3.horizon-bcbsnj.com/hcm/MedPol2.nsf/MedicalPolicies/RFMI-A72J7E>
9. <https://www.nhlbi.nih.gov/health/health-topics/topics/angioplasty/>
10. https://downloads.cms.gov/medicare-coverage-database/lcd_attachments/28565_28/28565_cv026_cbq_10012010.pdf
11. https://cignaforhcp.cigna.com/public/content/pdf/coveragePolicies/medical/mm_0510_coveragepositioncriteria_transthoracic_echocardiography.pdf
12. <https://medlineplus.gov/ency/article/001096.htm>
13. <http://www.adph.org/newbornscreening/assets/PulseOxScreeningAlgorithm.pdf>
14. <http://www.clevelandclinicmeded.com/medicalpubs/diseasemanagement/cardiology/mitral-valve-disease/>
15. <http://mykentuckyheart.com/information/VentricularSeptalDefect.htm>
16. <http://cardioiap.org/VentricularSeptalDefect.aspx>
17. <http://misc.medscape.com/pi/android/medscapeapp/html/A162692-business.html>