



Ventricular Assist Devices

Clinical Coverage Criteria

Overview

Ventricular Assist Devices (VAD) are a blood pump implanted during a surgical procedure and is attached to one or both ventricles. VAD's are implanted in a weakened or damaged heart in order to assist the heart with pumping blood decreasing the work of the ventricle. VAD's are used as both a bridge to transplantation and as destination therapy.

Policy

Fallon Health requires Prior Authorization for Ventricular Assist Devices. The below criteria must be met in order for approval. Medical records from the providers who have diagnosed or treated the symptoms prompting this request are also required.

Criteria for Destination Therapy (all criteria must be met)

1. The device has been FDA approved for Destination Therapy
2. The member has chronic end-stage heart failure as classified by New York Heart Association (NYHA) class IV (see table below) and is not a candidate for a heart-transplant
3. The member has failed to respond to maximum medical management such as:
 - Beta-blockers or Ace Inhibitors for at least 45 of the last 60 days. Or
 - Has been balloon pump dependent for the 7 days. Or
 - Has been IV inotrope dependent for 14 days.
4. Have left ventricular ejection fraction (LVEF) less than 25%
5. The member demonstrates functional limitations with peak oxygen consumption ≤ 14 ml/kg/min

Criteria for Bridge to Transplantation (all criteria must be met)

1. The device must be FDA approved
2. The member is a candidate for a heart-transplant but is not expected to survive until transplantation without a VAD

New York Heart Association (NYHA) Functional Classification:

Class	Patient Symptoms
I	No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea (shortness of breath).
II	Slight limitation of physical activity. Comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea (shortness of breath).
III	Marked limitation of physical activity. Comfortable at rest. Less than ordinary

	activity causes fatigue, palpitation, or dyspnea.
IV	Unable to carry on any physical activity without discomfort. Symptoms of heart failure at rest. If any physical activity is undertaken, discomfort increases.

Exclusions

- Any use of a Ventricular Assist Device (VAD) other than outlined above.

Codes

Code type	Code	Description
CPT	33975	Insertion of ventricular assist device; extracorporeal, single ventricle
	33976	Insertion of ventricular assist device; extracorporeal, biventricular
	33977	Removal of ventricular assist device; extracorporeal, single ventricle
	33978	Removal of ventricular assist device; extracorporeal, biventricular
	33979	Insertion of ventricular assist device, implantable intracorporeal, single ventricle
	33980	Removal of ventricular assist device, implantable intracorporeal, single ventricle
	33981	Replacement of extracorporeal ventricular assist device, single or biventricular, pump(s), single or each pump
	33982	Replacement of ventricular assist device pump(s); implantable intracorporeal, single ventricle, without cardiopulmonary bypass
	33983	Replacement of ventricular assist device pump(s); implantable intracorporeal, single ventricle, with cardiopulmonary bypass
	33990	Insertion of ventricular assist device, percutaneous including radiological supervision and interpretation; arterial access only
	33991	Insertion of ventricular assist device, percutaneous including radiological supervision and interpretation; both arterial and venous access, with transeptal puncture
	33992	Removal of percutaneous ventricular assist device at separate and distinct session from insertion
	33993	Repositioning of percutaneous ventricular assist device with imaging guidance at separate and distinct session from insertion
	33999	Unlisted procedure, cardiac surgery

References

- CMS: National Coverage Determination (NCD) for Artificial Hearts and Related Devices (20.9) Last revised January 2019.
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5. Lietz K, Long JW, Kfoury AG, et al. Outcomes of left ventricular assist device implantation as destination therapy in the post-REMATCH era: implications for patient selection. Circulation. 2007 Jul 31;116(5):497-505. Epub 2007 Jul 16.
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Policy History

Origination date: 02/01/2016
 Approval(s): Technology Assessment Committee: 1/27/2016 (new policy), 01/25/2017 (updated references), 01/24/2018 (annual review), 01/23/2019 (updated references)

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