To all beneficiaries enrolled in a Prepaid Health Plan (PHP): for questions about benefits and services available on or after November 1, 2019, please contact your PHP.

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1.0 Description of the Procedure, Product, or Service

A ventricular assist device (VAD) is surgically attached to one or both intact heart ventricles and used to assist or augment the ability of a damaged or weakened native heart to pump blood. Improvement in the performance of the native heart may allow the device to be removed. VADs are used as a bridge to a heart transplant, for support of blood circulation post-cardiotomy, or destination therapy.

1.1 Definitions

**Bridge-to-Transplant (BTT):** A ventricular assist device used for a beneficiary waiting for a heart transplant.

**Destination Therapy (DT):** A ventricular assist device used as a long term or permanent placement for a beneficiary that requires permanent mechanical cardiac support and is not a candidate for heart transplantation at the time of the VAD implant.

**Native Heart:** A beneficiary’s natural heart.

2.0 Eligibility Requirements

2.1 Provisions

2.1.1 General

(The term “General” found throughout this policy applies to all Medicaid and NCHC policies)

a. An eligible beneficiary shall be enrolled in either:
   1. the NC Medicaid Program (Medicaid is NC Medicaid program, unless context clearly indicates otherwise); or
   2. the NC Health Choice (NCHC is NC Health Choice program, unless context clearly indicates otherwise) Program on the date of service and shall meet the criteria in Section 3.0 of this policy.

b. Provider(s) shall verify each Medicaid or NCHC beneficiary’s eligibility each time a service is rendered.

c. The Medicaid beneficiary may have service restrictions due to their eligibility category that would make them ineligible for this service.

d. Following is only one of the eligibility and other requirements for participation in the NCHC Program under GS 108A-70.21(a): Children must be between the ages of 6 through 18.
2.1.2 Specific

(The term “Specific” found throughout this policy only applies to this policy)

a. Medicaid
   None Apply.

b. NCHC
   None Apply.

2.2 Special Provisions

2.2.1 EPSDT Special Provision: Exception to Policy Limitations for a Medicaid Beneficiary under 21 Years of Age

a. 42 U.S.C. § 1396d(r) [1905(r) of the Social Security Act]

Early and Periodic Screening, Diagnostic, and Treatment (EPSDT) is a federal Medicaid requirement that requires the state Medicaid agency to cover services, products, or procedures for Medicaid beneficiary under 21 years of age if the service is medically necessary health care to correct or ameliorate a defect, physical or mental illness, or a condition [health problem] identified through a screening examination (includes any evaluation by a physician or other licensed practitioner).

This means EPSDT covers most of the medical or remedial care a child needs to improve or maintain his or her health in the best condition possible, compensate for a health problem, prevent it from worsening, or prevent the development of additional health problems.

Medically necessary services will be provided in the most economic mode, as long as the treatment made available is similarly efficacious to the service requested by the beneficiary’s physician, therapist, or other licensed practitioner; the determination process does not delay the delivery of the needed service; and the determination does not limit the beneficiary’s right to a free choice of providers.

EPSDT does not require the state Medicaid agency to provide any service, product or procedure:

1. that is unsafe, ineffective, or experimental or investigational.
2. that is not medical in nature or not generally recognized as an accepted method of medical practice or treatment.

Service limitations on scope, amount, duration, frequency, location of service, and other specific criteria described in clinical coverage policies may be exceeded or may not apply as long as the provider’s documentation shows that the requested service is medically necessary “to correct or ameliorate a defect, physical or mental illness, or a condition” [health problem]; that is, provider documentation shows how the service, product, or procedure meets all EPSDT criteria, including to correct or improve or maintain the beneficiary’s health in the best condition possible, compensate for a health problem, prevent it from worsening, or prevent the development of additional health problems.
b. **EPSDT and Prior Approval Requirements**

1. If the service, product, or procedure requires prior approval, the fact that the beneficiary is under 21 years of age does **NOT** eliminate the requirement for prior approval.

2. **IMPORTANT ADDITIONAL INFORMATION** about EPSDT and prior approval is found in the *NCTracks Provider Claims and Billing Assistance Guide*, and on the EPSDT provider page. The Web addresses are specified below.

  *NCTracks Provider Claims and Billing Assistance Guide:*  
  [https://www.nctracks.nc.gov/content/public/providers/provider-manuals.html](https://www.nctracks.nc.gov/content/public/providers/provider-manuals.html)

  EPSDT provider page: [https://medicaid.ncdhhs.gov/](https://medicaid.ncdhhs.gov/)

2.2.2 **EPSDT does not apply to NCHC beneficiaries**

2.2.3 **Health Choice Special Provision for a Health Choice Beneficiary age 6 through 18 years of age**

NC Medicaid shall deny the claim for coverage for an NCHC beneficiary who does not meet the criteria within **Section 3.0** of this policy. Only services included under the NCHC State Plan and the NC Medicaid clinical coverage policies, service definitions, or billing codes are covered for an NCHC beneficiary.

3.0 **When the Procedure, Product, or Service Is Covered**

*Note: Refer to Subsection 2.2.1 regarding EPSDT Exception to Policy Limitations for Medicaid Beneficiaries under 21 Years of Age.*

3.1 **General Criteria Covered**

Medicaid and NCHC shall cover the procedure, product, or service related to this policy when medically necessary, and:

a. the procedure, product, or service is individualized, specific, and consistent with symptoms or confirmed diagnosis of the illness or injury under treatment, and not in excess of the beneficiary’s needs;

b. the procedure, product, or service can be safely furnished, and no equally effective and more conservative or less costly treatment is available statewide; and

c. the procedure, product, or service is furnished in a manner not primarily intended for the convenience of the beneficiary, the beneficiary’s caretaker, or the provider.

3.2 **Specific Criteria Covered**

3.2.1 **Specific criteria covered by both Medicaid and NCHC**

Medicaid and NCHC shall cover a Food and Drug Administration FDA-approved Ventricular Assist Device (VAD) when used according to the device-specific, FDA-approved indications.
VADs are covered when all the following criteria for a given indication are met:

a. **Post-cardiotomy:**
   1. The beneficiary is in relatively good health other than the cardiovascular problem for which surgery was undertaken;
   2. All appropriate measures have been attempted to correct low arterial pH, arterial blood gas abnormalities, electrolytes, hypovolemia, inadequate cardiac rate, dysrhythmias and residual hypothermia;
   3. Cardiac resuscitation employing pharmacologic agents in a systematic fashion has been attempted. The use of the intra-aortic balloon pump (IABP) is recommended prior to VAD assistance, its use may not be appropriate, as in cases of fibrillating heart or peripheral atherosclerosis; and
   4. Hemodynamic selection criteria:
      A. Cardiac index (CI) of less than 2.0L/min/m while receiving maximal medical support;
      B. Systolic Blood Pressure less than 90mm Hg;
      C. Pulmonary Capillary Wedge Pressure greater than 18 mm Hg;
      D. Left atrial pressure of 20 mm Hg; and
      E. On maximum inotropic volume and support.

b. **Bridge to Transplant**
   1. The beneficiary is
      A. approved for heart transplantation by a Medicare-approved heart transplant center and is active on the Organ Procurement and Transplantation Network (OPTN) heart transplant waitlist, or
      B. undergoing evaluation to determine candidacy for a cardiac transplant; and
   2. at-risk of imminent death from left ventricular failure before donor heart procurement.

**NOTE:** The use of an FDA-approved biventricular device may be considered as a medically necessary bridge-to-transplantation for a beneficiary with biventricular failure who is currently listed as a candidate for heart transplant.

c. **Destination Therapy** (all criteria must be met)
   1. The device has been FDA approved for Destination Therapy
   2. The beneficiary has chronic end-state 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 beneficiary has failed to respond to maximum medical management such as:
      A. Beta-blockers or Ace Inhibitors for at least 45 of the last 60 days, or
      B. Has been balloon pump dependent for the last 7 days, or
      C. 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 less than or equal to 14 ml/kg/min. (Note: This criterion may be waived in a beneficiary who is unable to perform exercise stress testing).

New York Heart Association (NYHA) Functional Classification:

<table>
<thead>
<tr>
<th>Class</th>
<th>Beneficiary Symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>I</td>
<td>No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea (shortness of breath).</td>
</tr>
<tr>
<td>II</td>
<td>Slight limitation of physical activity. Comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea (shortness of breath).</td>
</tr>
<tr>
<td>III</td>
<td>Marked limitation of physical activity. Comfortable at rest. Less than ordinary activity causes fatigue, palpitation, or dyspnea.</td>
</tr>
<tr>
<td>IV</td>
<td>Unable to carry on any physical activity without discomfort. Symptoms of heart failure at rest. If any physical activity is undertaken, discomfort increases.</td>
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</table>

3.2.2 Medicaid Additional Criteria Covered
None Apply.

3.2.3 NCHC Additional Criteria Covered
None Apply.

4.0 When the Procedure, Product, or Service Is Not Covered

Note: Refer to Subsection 2.2.1 regarding EPSDT Exception to Policy Limitations for Medicaid Beneficiaries under 21 Years of Age.

4.1 General Criteria Not Covered

Medicaid and NCHC shall not cover the procedure, product, or service related to this policy when:

a. the beneficiary does not meet the eligibility requirements listed in Section 2.0;

b. the beneficiary does not meet the criteria listed in Section 3.0;

c. the procedure, product, or service duplicates another provider’s procedure, product, or service; or

d. the procedure, product, or service is experimental, investigational, or part of a clinical trial.
4.2  Specific Criteria Not Covered

4.2.1  Specific Criteria Not Covered by both Medicaid and NCHC

Medicaid and NCHC shall not cover a VAD when the beneficiary does not meet the medical necessity criteria listed in Section 3.0 and for any of the following situations:

a. For any off-label indication;

b. Use of a non-FDA approved or cleared ventricular assist device is considered investigational; or

c. Other applications of ventricular devices that are considered investigational.

d. Contraindicated in the following conditions:
   1. Chronic irreversible hepatic, renal or respiratory failure;
   2. Systemic infection;
   3. Blood dyscrasia; or
   4. Uncorrected aortic insufficiency.

4.2.2  Medicaid Additional Criteria Not Covered

None Apply.

4.2.3  NCHC Additional Criteria Not Covered

a. NCGS § 108A-70.21(b) “Except as otherwise provided for eligibility, fees, deductibles, copayments, and other cost sharing charges, health benefits coverage provided to children eligible under the Program shall be equivalent to coverage provided for dependents under North Carolina Medicaid Program except for the following:
   1. No services for long-term care.
   2. No nonemergency medical transportation.
   3. No EPSDT.
   4. Dental services shall be provided on a restricted basis in accordance with criteria adopted by the Department to implement this subsection.”

4.3  Psychosocial History

Medicaid and NCHC shall not cover a VAD when the beneficiary or caretaker’s psychosocial history limits the ability to comply with pre-transplant or post-transplant medical care.

4.4  Medical Compliance

Medicaid and NCHC shall not cover a VAD when the beneficiary or caretaker’s failure or refusal to comply would make compliance with the disciplined medical regime improbable.
5.0 Requirements for and Limitations on Coverage

Note: Refer to Subsection 2.2.1 regarding EPSDT Exception to Policy Limitations for Medicaid Beneficiaries under 21 Years of Age.

5.1 Prior Approval
Medicaid and NCHC shall not require prior approval for a ventricular assist device.

5.2 Prior Approval Requirements
5.2.1 General
None Apply.

5.2.2 Specific
None Apply.

5.3 Additional Limitations or Requirements
LIMITATIONS: Replacements of the device or a component of the device is considered medically necessary when any of the following criteria are met:

a. A change in the physiological condition of the insured individual documented in the medical record necessitates a different device; or

b. A comorbidity is proven to be exacerbated by the current device or component; or

c. A non-warranty repair of the device or component is imminent; and the cost of the required repair is estimated to be more than the cost of a replacement device or component.

6.0 Providers Eligible to Bill for the Procedure, Product, or Service

To be eligible to bill for the procedure, product, or service related to this policy, the provider(s) shall:

a. meet Medicaid or NCHC qualifications for participation;

b. have a current and signed Department of Health and Human Services (DHHS) Provider Administrative Participation Agreement; and

c. bill only for procedures, products, and services that are within the scope of their clinical practice, as defined by the appropriate licensing entity.

6.1 Provider Qualifications and Occupational Licensing Entity Regulations
None Apply.

6.2 Provider Certifications
None Apply.
**7.0 Additional Requirements**

*Note: Refer to Subsection 2.2.1 regarding EPSDT Exception to Policy Limitations for Medicaid Beneficiaries under 21 Years of Age.*

**7.1 Compliance**

Provider(s) shall comply with the following in effect at the time the service is rendered:

a. All applicable agreements, federal, state and local laws and regulations including the Health Insurance Portability and Accountability Act (HIPAA) and record retention requirements; and

b. All NC Medicaid’s clinical (medical) coverage policies, guidelines, policies, provider manuals, implementation updates, and bulletins published by the Centers for Medicare and Medicaid Services (CMS), DHHS, DHHS division(s) or fiscal contractor(s).

FDA approved procedures, products, and devices for implantation must be used.

Implants, products, and devices must be used according to all current FDA requirements at the time of surgery.
## 8.0 Policy Implementation/Revision Information

**Original Effective Date:** January 1, 1994

**Revision Information:**

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<tr>
<th>Date</th>
<th>Section Revised</th>
<th>Change</th>
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<tr>
<td>7/1/05</td>
<td>Entire Policy</td>
<td>Policy was updated to include coverage criteria effective with approved date of State Plan amendment 4/1/05.</td>
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<tr>
<td>9/1/05</td>
<td>Section 2.2</td>
<td>The special provision related to EPSDT was revised.</td>
</tr>
<tr>
<td>12/1/05</td>
<td>Section 2.2</td>
<td>The web address for DMA’s EDPST policy instructions was added to this section.</td>
</tr>
<tr>
<td>12/1/06</td>
<td>Sections 2.2</td>
<td>The special provision related to EPSDT was revised.</td>
</tr>
<tr>
<td>12/1/06</td>
<td>Sections 3.0 and 4.0</td>
<td>A note regarding EPSDT was added to these sections.</td>
</tr>
<tr>
<td>5/1/07</td>
<td>Sections 2 through 4</td>
<td>EPSDT information was revised to clarify exceptions to policy limitations for beneficiaries under 21 years of age.</td>
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<tr>
<td>5/1/07</td>
<td>Attachment A</td>
<td>Added the UB-04 as an accepted claims form.</td>
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<tr>
<td>11/1/11</td>
<td>Throughout</td>
<td>Updated Standard DMA template language</td>
</tr>
<tr>
<td>11/1/11</td>
<td>Sections 1.0, 3.1, 3.2, 3.4, 3.5, 4.1 and 4.2, 5.1, 5.2, 7.1, Attachment A –C. coding</td>
<td>Policy was updated to include coverage criteria and requirements to meet current community standards of practice</td>
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<td>3/1/12</td>
<td>Throughout</td>
<td>Technical changes to merge Medicaid and NCHC current coverage into one policy.</td>
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<tr>
<td>10/01/2015</td>
<td>All Sections and Attachments</td>
<td>Updated policy template language and added ICD-10 codes to comply with federally mandated 10/1/2015 implementation where applicable.</td>
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<tr>
<td>03/01/2018</td>
<td>Section 1.0</td>
<td>Deleted the previous description and added a new description.</td>
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<tr>
<td>03/01/2018</td>
<td>Subsection 1.1</td>
<td>Added definitions for Bridge To Transplant, Destination-Therapy and Native heart</td>
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<tr>
<td>03/01/2018</td>
<td>Subsection 3.2.1.b</td>
<td>Updated text.</td>
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<tr>
<td>03/01/2018</td>
<td>Subsection 3.2.1.c</td>
<td>Updated text.</td>
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<tr>
<td>03/01/2018</td>
<td>Subsection 4.2.1</td>
<td>Removed text in a sentence and created a list as 4.2.1.d</td>
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<tr>
<td>03/01/2018</td>
<td>Subsection 5.2</td>
<td>Prior approval requirement removed.</td>
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<tr>
<td>03/01/2018</td>
<td>Subsection 5.3</td>
<td>Limitations added for a replacement of the device or a component of the device.</td>
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<tr>
<td>03/01/2018</td>
<td>Subsection 7.1</td>
<td>Updated text. Removal of last statement.</td>
</tr>
<tr>
<td>03/01/2018</td>
<td>Attachment A, Sections B and C</td>
<td>Remove CPT, Revenue and ICD 10 codes from the policy.</td>
</tr>
<tr>
<td>03/15/2019</td>
<td>Table of Contents</td>
<td>Added, “To all beneficiaries enrolled in a Prepaid Health Plan (PHP): for questions about benefits and services available on or after November 1, 2019, please contact your PHP.”</td>
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<tr>
<td>03/15/2019</td>
<td>All Sections and Attachments</td>
<td>Updated policy template language.</td>
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Attachment A: Claims-Related Information

Provider(s) shall comply with the, NCTracks Provider Claims and Billing Assistance Guide, Medicaid bulletins, fee schedules, NC Medicaid’s clinical coverage policies and any other relevant documents for specific coverage and reimbursement for Medicaid and NCHC:

A. Claim Type

Professional (CMS-1500/837P transaction)
Institutional (UB-04/837I transaction)

B. International Classification of Diseases and Related Health Problems, Tenth Revisions, Clinical Modification (ICD-10-CM) and Procedural Coding System (PCS)

Provider(s) shall report the ICD-10-CM and Procedural Coding System (PCS) to the highest level of specificity that supports medical necessity. Provider(s) shall use the current ICD-10 edition and any subsequent editions in effect at the time of service. Provider(s) shall refer to the applicable edition for code description, as it is no longer documented in the policy.

C. Code(s)

Provider(s) shall report the most specific billing code that accurately and completely describes the procedure, product or service provided. Provider(s) shall use the Current Procedural Terminology (CPT), Health Care Procedure Coding System (HCPCS), and UB-04 Data Specifications Manual (for a complete listing of valid revenue codes) and any subsequent editions in effect at the time of service. Provider(s) shall refer to the applicable edition for the code description, as it is no longer documented in the policy.

If no such specific CPT or HCPCS code exists, then the provider(s) shall report the procedure, product or service using the appropriate unlisted procedure or service code.

Unlisted Procedure or Service

CPT: The provider(s) shall refer to and comply with the Instructions for Use of the CPT Codebook, Unlisted Procedure or Service, and Special Report as documented in the current CPT in effect at the time of service.

HCPCS: The provider(s) shall refer to and comply with the Instructions For Use of HCPCS National Level II codes, Unlisted Procedure or Service and Special Report as documented in the current HCPCS edition in effect at the time of service.

D. Modifiers

Provider(s) shall follow applicable modifier guidelines.

E. Billing Units

One billing unit is allowed per day.

F. Place of Service

Inpatient Acute Care Hospital.
G. Co-payments

Co-payments are not required for a Ventricular Assist Device.

For Medicaid refer to Medicaid State Plan:
https://medicaid.ncdhhs.gov/get-involved/nc-health-choice-state-plan

For NCHC refer to NCHC State Plan:
https://medicaid.ncdhhs.gov/get-involved/nc-health-choice-state-plan

H. Reimbursement

Provider(s) shall bill their usual and customary charges.
For a schedule of rates, refer to: https://medicaid.ncdhhs.gov/