

# Ventricular Assist Devices

## Quick Facts



The ventricular assist device (VAD) is one of the most common devices used in bridge-to-transplant and destination therapy for heart failure patients. The VAD destination therapy program at WellSpan ensures the best possible outcomes for your patients.

### Physicians and Clinical Staff

It is the goal WellSpan Heart & Vascular's surgeons, cardiologists, advanced practice clinicians, and clinical staff to work as your partner in the care and treatment of your patients.



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*Heart Failure Program Director, WellSpan Heart & Vascular*



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*VAD Coordinator, WellSpan York Hospital*

### Referrals

Physicians with patients who might be candidates for heart transplant surgery or who the referring physician believes may be a potential candidate for VAD Destination Therapy should contact WellSpan Cardiothoracic Surgery.

Call (717) 851-6454

Complete a referral request form in e-Care using mailbox MB CT SURGERY.

### Patient Referral Criteria

Patients with any one of the following risk factors and who are New York Heart Association (NYHA) Class III or IV should be considered for referral for mechanical circulatory support (MCS) and/or cardiac transplantation evaluation.

- Inability to walk one block without shortness of breath
- Intolerant or refractory to ACE inhibitors, angiotensin receptor blockers, or beta-blockers
- One heart failure-related hospital admission in the past six months
- CRT non-responder
- High diuretic dose (e.g., 120 mg/d furosemide)
- Serum sodium < 136 mmol/L
- BUN > 40 mg/dL or serum creatinine > 1.8 mg/dL

### WellSpan Cardiothoracic Surgery

Apple Hill Medical Center  
25 Monument Road, Suite 190  
York, PA 17403  
(717) 851-6454

### WellSpan Cardiology

Apple Hill Medical Center  
25 Monument Road, Suite 200  
York, PA 17403  
(717) 851-2441

For additional information, visit [www.WellSpan.org/HV](http://www.WellSpan.org/HV)

## Potential Benefits of MCS

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- Restore cardiac output and bloodflow
- Help patients resume their daily lives with a significant reduction of heart failure symptoms
- Improve end-organ function
- Initiate molecular and cellular improvements in the Myocardium

## Hospital Affiliation

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The physicians that are part of the VAD destination therapy program at WellSpan give patients access to exceptional inpatient care at WellSpan York Hospital.

## Circulatory Support

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Mechanical circulatory support (MCS) therapy boosts hemodynamic function in failing hearts through the use of ventricular assist devices (VADs). For cardiac transplant-eligible patients facing an extended wait for a donor heart, MCS can provide Bridge-to-Transplantation Therapy, both for intermediate support and for optimization of long-term transplant outcomes. Patients who are ineligible for transplant may benefit from MCS as Destination Therapy, which provides chronic support. For other patients unable to wean from cardiopulmonary bypass, MCS can provide support during the post-surgery recovery period. Some VADs are specially designed to provide short-term support in acute hemodynamic compromise while more definitive treatment decisions are made.

MCS can help physiological events that could lead to significant improvement in both survival and quality of life. Cardiac output is restored at once, enhancing the functioning of end organs such as the liver and kidneys. Molecular and cellular improvements in the myocardium follow, as well as improvement in neurohormonal modulation.

## Ventricular Assist Devices

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The left ventricular assist device is one of the most common devices used in bridge-to-transplant and destination therapy. Most of these devices can provide several years of circulatory support for a broad range of advanced heart failure patients. Many are small in size and are quiet which makes them ideal for a wide range of patients. The most current generation of VADs can offer a range of features and benefits that include:

- Implantation requires a less invasive surgical procedure
- Relative ease of management; completely wearable system
- Low-dose anticoagulation regimen
- Improvement of hemodynamics prior to cardiac transplantation can help optimize long-term outcomes

Note: WellSpan York Hospital received certification from The Joint Commission as a Ventricular Assist Device Destination Therapy program in November 2013.

