

HEART FAILURE TODAY

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► More Access and Specialized Care, Better Therapies for HF

Updated guidelines and new medications are driving care of heart failure (HF), with more community practices staffed with advanced practice nurses and improved interventions for those with severe heart failure, including the greater availability of mechanical support. With an aging population and the prevalence of related conditions, heart centers are dealing with an emerging surge of patients needing evaluation, staging, stabilization, and management for this condition.

“When these patients come to us, our goal is to optimize their medical therapy, ensuring that they are on appropriate guideline-directed medical therapy (GDMT) and pursue any additional diagnostic or therapeutic interventions that can help improve their heart failure,” said Tolulope Agunbiade, MD, director of Virtua’s Advanced Heart Failure Program.

GDMT Improves Standardization, Effectiveness

The milestone advent of sodium-glucose co-transporter 2 (SGLT2) inhibitors has permitted the move from triple to quadruple therapy (see page 2). As a result, GDMT is further reducing morbidity and hospitalization from HF.

“It’s made tailoring combination therapy a bit more nuanced and thus specialized. There are some cautions, related to potential side effects and possible impact on renal function,” said Dr. Agunbiade, who oversees both inpatient and outpatient HF services at Virtua. “But setting and monitoring treatment, and tracking disease, has become more sophisticated with it, to the benefit of all patients.”

With implantation of ventricular assist devices (VADs) as a near-term goal, the Virtua program also partners with other centers to monitor patients with VADs. Candidates for such devices or heart transplant may be eligible for inotropic support as a bridge to the more definitive treatment. Patients can continue this support on an outpatient basis.

Specialized Nursing Key to Following HF Patients

A long list of cardiac causes can lead to the damage and insufficiency that brings on HF, the cost for care of which will rise by tens of billions of dollars this decade in the

U.S. Because of the slow progression of HF, providers may miss the opportunity to refer to specialty care for common symptoms like dyspnea, fatigue, fluid retention, cardiac arrhythmia, and abnormal organ function.

To stage HF and potentially consider more aggressive therapy, workup will soon go beyond echocardiography to include cardiometabolic stress testing. An Advanced Heart Failure Clinic at Virtua Our Lady of Lourdes Hospital will also complement the HF program. Virtua’s program already delivers coordinated, consistent care that often begins in the hospital but is also provided on an outpatient basis across five locations in South Jersey, staffed by specially trained heart failure APNs and RNs. Cardiologists and other referrers can direct patients to these clinics for monitoring. “We like to say that we deal in heart function, not heart failure,” said Theresa Rowe, MSN, CRNP, Director of Heart Failure Services at Virtua.

Clinical practice guidelines now emphasize initiating HF therapy early and rapidly. “People at high risk or with mild HF who get GDMT and make healthy lifestyle choices can maintain a good quality of life,” said Dr. Agunbiade.

Out of Hospital

- Prevent disease progression
- Reduce mortality and hospitalizations
- Relieve signs and symptoms
- Prevent readmissions
- Improve quality of life
- Patient education
- Lifestyle adjustments

In Hospital

- Optimize treatment strategy
 - Pharmacological therapy
 - Device therapy
- Minimize length of stay
- Patient education

Primary objectives in managing heart failure.

To learn more or refer a patient, call 856-325-4261

Advances Across Range of HF Areas

For systolic HF (HFrEF, LVEF <40%) and diastolic HF (HF with preserved ejection fraction, HFpEF, LVEF >50%), the heart failure field also has other advances in development and early use, as well as some special areas of focus:

Devices, Medications, Therapies

- ▶ As SGLT2 inhibitors are added to foundational combined therapy of angiotensin receptor-neprilysin system inhibitors (ARNIs), beta blockers, and mineralocorticoid receptor antagonists (MRAs), other classes of drugs are also under investigation.
- ▶ Though GDMT can help more HF patients manage without implantable cardioverter defibrillators (ICDs), the guidelines include recommendations for ICDs when they are needed to help minimize the risk of sudden cardiac death.
- ▶ VADs have advanced to be more than a bridge to a heart transplant, finding successful, life-extending use for advanced HF patients who are not transplant candidates.
- ▶ To potentially prevent further cardiac remodeling, Virtua electrophysiology is offering such techniques as cardiac contractility modulation (CCM) therapy.
- ▶ A synthetic mRNA injection that encodes for relaxin, a hormone that changes blood flow in ways potentially beneficial for heart failure patients, is in early trials.

Amyloid Disease

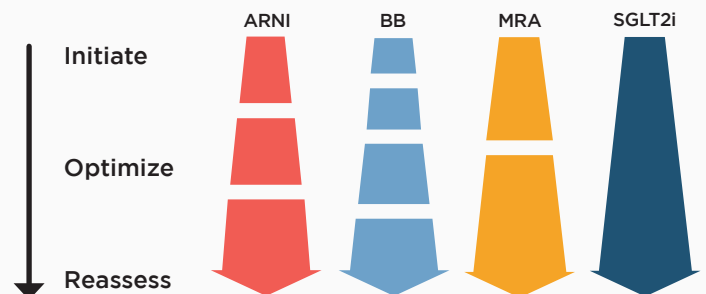
Diagnostic and treatment modalities for cardiac amyloidosis have improved in recent years, with more drug therapies available and many more currently under investigation. Tafamidis, formerly restricted in use to neurologic-involved disease, can extend survival in cases of cardiac involvement. With particular focus on amyloid light chain disease, Virtua heart specialists work with hematologists in

medical/chemotherapeutic treatment, while also partnering in a referral relationship with centers offering trial access to other new therapies, including gene-targeted treatments.

Cardiotoxicity

Similarly collaborating with medical oncologists, the heart failure team can help to monitor and manage patients before, during, and after treatment with cardiotoxic drugs. As cancer-related mortality has decreased over recent decades, side effects of chemotherapeutic treatment, though an exceptional occurrence, have gained more significance. Acute and long-term toxicities can result in vascular complications such as clots, cardiac arrhythmia, hypertension, or left ventricular dysfunction that may or may not be reversible and lead to heart failure.

Potential for cardiotoxicity may affect choice of cancer treatment for an individual, depending on the patient's risk factors. To get a more precise measure of ventricular function in their oncologic patient population, Virtua cardiologists routinely perform strain echocardiography, which gives a physical measure of heart wall contraction. The field of cardio-oncology has thus grown with the need to deliver the best cancer treatments with cardiac safety.



Consider additional therapies

Current guideline rubric for quadruple medical therapy for heart failure.