

Guidelines for the Management of Heart Failure (HF) March 2023

Appendix A. Older adults, Palliative, and Supportive domains of care¹

Risk of Heart Failure

At 40 years of age, lifetime risk for incident HF (medical event secondary to heart failure, ie. hospitalization) is 20% for both men and women. The risk remains the same at 80 years of age, despite having a shorter remaining life expectancy. LVEF is preserved in at least two-thirds of older adults with the diagnosis of HF.

Heart Failure Outcomes

Positive treatment outcomes are strongly associated with adherence to guideline-directed medical therapy (GDMT).

In study, among 1233 patients with HF over the age of 80, a 40% mortality was observed at average 27-month follow up.

Palliative and Supportive Care Domains to Improve Process of Care and Patient Outcomes	
High-quality communication	<p>Central to palliative care approach, along with patient-caregiver engagement throughout the process of disease progression.</p> <p>Palliative and supportive care discussions do not imply that a formal palliative care consultation is needed for each patient but that strategies should be incorporated by all team members throughout the continuum of care.</p>
Conveyance of prognosis	<p>Dependence on, and deactivation of, potentially life-sustaining therapies should be anticipated and discussed at the time of therapy initiation. Utilization should be reconsidered serially with changing medical realities and evolving goals of care.</p> <p>Failure to proactively address topics such as deactivation of ICD and LVAD therapies can lead to suffering at the end of life for both patient and caregiver.</p> <p>While objective risk models or methods of disease staging can calibrate expectations of patient and caregiver, discussions on prognosis should have a note of uncertainty conveyed. Often summarized as "hope for the best, plan for the worst."</p>
Clarifying goals of care	<p>As disease progresses, patient goals will involve decisions about when to discontinue treatments designed primarily to prolong life (eg, ICD, hospitalization, tube feeding), when to initiate treatments to reduce pain and suffering but that may hasten death (eg, narcotics), and decisions about the location of death, home services, and hospice care.</p> <p>Exploring patients' expressed preferences, values, needs, concerns, means and desires through clinician-led discussion can provide clarity. Coordination of values and treatment is paramount to achieve care goals.</p>

Palliative and Supportive Care Domains to Improve Process of Care and Patient Outcomes...continued	
Shared decision-making	<p>Process by which patients, family members, and clinicians work together to make optimal health care decisions from medically reasonable options that align with patient values.</p> <p>Shared decision-making requires: unbiased medical evidence about the risks, benefits, and burdens of each care option, including no intervention; clinician expertise in communication and tailoring that evidence for individual patients; and patient goals and informed preferences.</p> <p>As overall illness progresses, major decisions are increasingly made regarding the initiation, continued use, and discontinuation of potentially life-sustaining therapies, including intravenous inotropes, ICDs, MCS, and renal replacement therapy. Patients have a right to decline or withdraw care at any time.</p>
Symptom management	<p>Dyspnea, fatigue, pain, nausea, depression, anxiety, and other symptoms of HF refractory to cardiovascular therapies can be partially remediated through palliative and supportive approaches in addition to GDMT.</p> <p>Formal palliative care consultation may be particularly helpful for patients with these: 1) refractory symptoms; 2) major medical decisions (eg, in the United States, inclusion of a palliative care specialist on the team is mandatory for payment from Medicare for LVAD implantation); and 3) multimorbidity, frailty, or cognitive impairment. An interdisciplinary palliative care intervention in patients with advanced HF showed greater benefits in QOL, anxiety, depression, and spiritual well-being compared with usual care alone</p>
Caregiver support	<p>Care of the patient with heart failure should extend to their loved ones, including beyond their death, to offer support to families and help them cope with loss. Support groups specifically for caregivers are available.</p> <p>Advance care planning is a process that supports understanding and sharing of patients' personal values, life goals, and preferences regarding future medical care. Key domains include discussing patients' values, documenting plans for medical treatments, designating a surrogate decision maker, and revisiting this process over time.</p> <p>Few patients with HF have formally defined their care goals and designated a surrogate decision maker.</p>

Appendix B: Treatment Algorithm for HF, Stage D Devices

Devices in treatment of HFrEF, Stages C and D

ICD	"Implantable Cardioverter-Defibrillator"; small battery-powered device placed to detect and stop arrhythmias; continuously monitors heartbeat and delivers electric shocks as needed to restore regular rhythm; 1- or 2-lead device
CRT-D	"Cardiac Resynchronization Therapy Defibrillator"; functions like a normal pacemaker to treat slow heart rhythms; additionally delivers small electrical impulses to both ventricles to help them contract at the same time; 3-lead device
MCS	"Mechanical Circulatory Support"; aids in heart function as bridge-to-transplant therapy or can be long terms treatment if no a candidate for transplant or surgery; examples include ventricular assist devices (VAD) and total artificialheart (TAH)

APPENDIX B: TREATMENT ALGORITHM FOR HF, STAGE D DEVICE

