Adults with Systolic Heart Failure 2015

Eligible Population	Key Components	Recommendation and Level of Evidence
Adults with suspicion of left-ventricular systolic dysfunction, including heart failure	Evaluation	Initial assessment should include: • Thorough history and physical examination [C], including depression screening, and assessment for coronary artery disease and risk factors. • Testing includes: chest X-ray, 12-lead electrocardiogram, lipid profile, CBC, electrolytes, calcium, magnesium, BUN. creatinine, blood glucose, liver function tests, TSH, urinalysis, and echocardiography with Doppler **[C]** • BNP is useful for diagnosis, and not for serial monitoring • Serial monitoring should include: weight, volume status, electrolytes, renal function and activity tolerance
Adults diagnosed with left-ventricular systolic dysfunction, including heart failure	Management	Recommended for routine use: • ACE inhibitors in all patients, unless contraindicated' **[A]** • Beta-blockade using carvedilol, sustained-release metoprolol. bisoprolol in all stable patients, unless contraindicated **[A]** • Consider referral for evaluation for implantable defibrillator, ventricular assist device or transplant in patients with LVEF<35%, NYHA Class ll-IV patients and those with worsening CHF • Consider referral for biventricular pacemaker for patients with symptomatic heart failure and QRS duration > 120 mesc • Consider referral of complex patients to an advanced heart failure management program • Vaccination against influenza and pneumococcal Recommended for use in select patients: • Diuretics and sodium restriction for evidence of fluid retention **[A]** • Spironolactone for patients with symptoms of heart failure, preserved renal function (creatinine < 2.0 in women; creatinine < 2.5 in men) and normal serum potassium concentration **[A]** • Use ARBs in patients who cannot tolerate ACE inhibitors due to cough or angioedema **[A]** • Consider hydralazine and isosorbide dinitrate for patients who cannot tolerate ACE inhibitors or ARBs, or African-American patients who remain symptomatic despite therapy **[A]** • Digoxin should only be used for patients who remain symptomatic despite diuretics, ACE inhibitors and beta blockers**[A]**
	Counseling and care management	Engage patients in office-based care management and self-management: • Careful review of medication regimen with patient and caregivers at hospitalization or other changes in treatment • Daily self-monitoring of weight and adherence to recommended patient action plan • Recognition of symptoms and when to seek medical attention • Moderate dietary sodium restriction (e.g., 2,000-2,500 mg sodium/day) • Risk factor modification (regular exercise 5 times per week as tolerated **[B];** smoking cessation; control of BP, DM, lipids) • Avoid excessive alcohol intake, illicit drug use, and the use of NSAIDS • Discuss goals of care, prognosis, advance directives, and palliative care.
Contraindications include: life-threatening adverse reactions (angioedema or anuric renal failure), pregnancy, hypotensive patients at immediate risk of cardiogenic shock, systolic blood pressure < 80 mm Hg. serum creatinine > 3 mg/dL. bilateral renal artery stenosis, or serum potassium > 5 5 mmol/L. • Contraindications include patients with current or recent fluid retention history, unstable or poorly controlled reactive airway disease, symptomatic bradycardia or advanced heart block (unless treated with a pacemaker), or recent treatment with an intravenous positive inotropic agent		