Self-management is key to heart failure treatment. Teach Intermountain’s MAWDS mnemonic to help promote compliance with these important self-care steps:

**Medication**

“Take your medicines”

Make sure your patients understand the importance of medications in their heart failure management. Tell them which medications they are taking and why. Most importantly, make sure they understand the necessity of taking their medications every day, even when they are feeling well.

**Activity**

“Stay active each day”

Many patients with heart failure are afraid to be active. For others, it just seems like too much of an effort. Encourage your patients to participate in some form of physical activity every day. Participation in a supervised cardiac rehabilitation program is a good way to help patients overcome their fears and understand their limits.

**Weight**

“Weigh yourself each day”

It is critical that your patients understand the importance of weighing themselves daily. Patients will be more likely to comply with daily weighing if they understand that you are concerned about fluid retention as it relates to heart failure. Patients should notify their provider when they gain more than 2 pounds in one day or 5 pounds from their usual/target weight.

**Diet**

“Follow your diet”

A good diet — especially sodium restriction — is critical to heart failure management. Helping patients understand how to restrict their sodium and learn other important diet elements can be time consuming. A referral to a registered dietitian is recommended for most patients.

**Symptoms**

“Recognize your symptoms”

Make sure your patients know how to recognize the signs and symptoms of heart failure, and tell them what you want them to do when they experience them. The MAWDS Self-Care Diary and Living with Heart Failure booklets described at right provide an action plan to guide patients.

**Other patient education resources:**

Intermountain also provides a Living with Heart Failure booklet, Heart Failure and Heart Failure Fluid Tracker fact sheets, and a Managing Heart Failure DVD for patients. View and order these and other resources from iprintstore.org.

If your patient smokes, provide resources to help them quit. Intermountain provides a smoking cessation booklet for this purpose.

**Quick Reference for Heart Failure 2016 Update**

**MANAGEMENT AND DRUG RECOMMENDATIONS**
ACE inhibitors (ACE-I) & ARBs (if ACE-I intolerant)

**BETA BLOCKERS**

- Bisoprolol (Prosist), Zebeta: Start at 2.5–5 mg daily, target 10–20 mg daily, max 20 mg daily.
- Enalapril (Vasotec): Start at 2.5 mg twice daily, target 5 mg twice daily, max 20 mg daily.
- Captopril (Capoten): Start at 25 mg 3 times daily, max 100 mg 3 times daily.
- Quinapril (Accupril): Start at 5 mg 2 times daily, max 20 mg 2 times daily.
- Valsartan (Du获 Min): Start at 160 mg daily, max 320 mg daily.

**DIGOXIN**

- Digitalis (Diovan): Start at 20–40 mg 2 times daily, max 140 mg 2 times daily.
- Candesartan (Atacand): Start at 4–8 mg daily, max 32 mg daily.
- Lisinopril (Prinivil, Zestril): Start at 10 mg daily, max 40 mg daily.

**ALDOSTERONE ANTAGONISTS**

- Spironolactone (Aldactone): Start at 25 mg daily, target 50 mg daily, max 400 mg daily.
- Eplerenone (Inspra): Start at 25 mg daily, target 50 mg daily, max 100 mg daily.
- Eplerenone (Inspra): Start at 25 mg daily, target 50 mg daily, max 100 mg daily.

**IVABRADINE**

- Ivabradine (Corlanor): Titrate beta-blocker therapy by up to 50% of target dose as tolerated (unless contraindicated) prior to initiation of ivabradine.

**KEY CARE PROCESSES for HOSPITALIZED PATIENTS**

- **Provide an ACE-I / ARB / ARNI at discharge** and document reason for not doing this.
- **Control obesity and diabetes.**
- **Treat ischemic heart disease.**
- **Treat atrial fibrillation.**
- **Treat ischemic heart disease.**
- **Control obesity and diabetes.**

**MOBILE INTEGRATION**

- Educate about initial side effects (fatigue, hypervolemia).
- **Consider adding digoxin for continued symptoms (NYHA Class III–IV)** despite optimum medical therapy.
- **Monitor serum K+** 3 days after starting therapy, at 1 week, then monthly for the first 3 months and with changes in renal function.
- **Obtain BMP to check K+ and creatinine if K+ < 5.0, or if creatinine is > 3.0 mg/dL daily.**
- **Indicator in patients with stable, symptomatic chronic heart failure in order to reduce hospitalization for worsening heart failure by closing the patient loop.**
- **Not indicated in acute decompensated heart failure.**
- **Monitor for drug interactions (CYP3A4 inducers and inhibitors).**

**HEART FAILURE with PRESERVED EF**

The following strategies should be used to manage heart failure with preserved EF:

- **Control volume overload.**
- **Treat hypertension.**
- **Control the rate of atrial fibrillation.**
- **Treat ischemic heart disease.**
- **Control obesity and diabetes.**

**DRIUG RECOMMENDATIONS for LVEF < 40%**

- **Assess for coronary artery disease.**
- **BETA BLOCKERS**
- **DIGOXIN**
- **ALDOSTERONE ANTAGONISTS**
- **IVABRADINE**

**LABS and other notes:**

- Obtain BMP to check K+ and creatinine. If K+ > 5.0, or if creatinine is > 3.0 mg/dL, supplement, aldosterone antagonists, or modify target dose of ACE-I.
- **Use ACE-I with caution in patients with renal impairment (creatinine > 3.0).**
- The following strategies should be used to manage heart failure with preserved EF:
- **Control volume overload.**
- **Treat hypertension.**
- **Control the rate of atrial fibrillation.**
- **Treat ischemic heart disease.**
- **Control obesity and diabetes.**

**HEART Failure? Perform diagnostic work-up, including measuring ventricular function:**

- **Echocardiogram (or other diagnostic test to measure LVEF).**
- **Vital signs and pulse oximetry.**
- **12-lead EKG.**

**Establish etiology:** Assess for coronary artery disease.

**ACE inhibitors (ACE-I/ARB/ARNI)**

- If LVEF < 35%, consider ACE-I/ARB/ARNI for low, high, very high-risk for diuretic requirement.

**Teach patient self-management (MAWDS):**

- Use MAWDS self-care diary and other patient education tools (see back of pocket card). **Follow up:**

- **Education about the course of heart failure and possible future need for devices, other medications, etc.**
- **Adjust background medications as necessary.**
- **Titrates dose of beta blocker and ACE-I/ARB/ARNI.**

**plus follow up:**

- **Measure LV function:**
- **3 months after maximum medical therapy is reached.**
- **Even if LVEF < 40%, consider beta blocker management.**
- **If LVEF < 35%, consider ICD therapy.**

**Blood work (CMP, CBC, BNP, lipid panel, ANA, urinalysis).**

**CYP3A4 inhibitors and inhibitors.**

**IVABRADINE**

- Ivabradine (Corlanor): Titrate beta-blocker therapy by up to 50% of target dose as tolerated (unless contraindicated) prior to initiation of ivabradine.

**Adjunct dose after 2 weeks based on clinical heart rate (HR).**

- > 50 bpm: Increase dose by 2.5 mg 2–3 times daily.
- > 60 bpm: Continue current dose < 50 bpm: Decrease dose by 2.5 mg twice daily (discontinue therapy if current dose is 2.5 mg twice daily).

**Assess resting HR prior to initiation of ivabradine and continue therapy to target doses (unless the patient has conduction defects or bradycardia that could lead to hemodynamic compromise).**

**Discontinue ACE-I at least 36 hours prior to initiation of an ARNI.**

**ACE-I not currently taking an ACE-I or ARB (or taking low dose).**

- Start at 25 mg twice daily with meals (until the patient has conduction defects or bradycardia that could lead to hemodynamic compromise).

**Evaluate systolic blood pressure at 1 mg daily, target 2.5 mg daily, max 10 mg daily.**

**IVABRADINE**

- Ivabradine (Corlanor): Titrate beta-blocker therapy by up to 50% of target dose as tolerated (unless contraindicated) prior to initiation of ivabradine.

**Adjunct dose after 2 weeks based on clinical heart rate (HR).**

- > 50 bpm: Increase dose by 2.5 mg 2–3 times daily.
- > 60 bpm: Continue current dose < 50 bpm: Decrease dose by 2.5 mg twice daily (discontinue therapy if current dose is 2.5 mg twice daily).