

**Rotation Name: Cardiology - Congestive Heart Failure**

**Rotation Site Leaders: Alan Naftilan, Lisa Mendes**

**Updated by: Lee Richardson**

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**Update: 7/5/2021 - mapped to new milestones 2.0 (sm)**

**Goals:**

The purposes of this educational unit are to:

- Provide broad clinical exposure on the diagnosis and inpatient management of heart failure and complications related to both acute and chronic heart failure
- Provide clinical experience in managing complex patients requiring coordination of multidisciplinary care in both the inpatient and outpatient setting
- Provide instruction to learners on how to incorporate guideline-directed medical therapies into the management of patients with heart failure

**Objectives:**

By the end of this educational block, residents in this rotation will be able to:

**Patient Care**

- Perform accurate assessments of volume status in newly admitted patients
- Institute guideline-directed medical therapies for patients with acute decompensated systolic heart failure
- Institute diuretic therapies for volume overload and recognize timing of cessation of these therapies with transition to outpatient regimens
- Identify patients requiring transfer to higher levels of care for inotropic support
- Recognize patients needing palliative care for advanced disease

**Medical Knowledge**

- Describe differences in management between heart failure with reduced vs. preserved ejection fraction
- Recognize indications for advanced therapies (LVAD, transplant)

**Interpersonal and Communication Skills**

- Direct goals of care conversations in patients with worsening heart failure

**Professionalism**

- Respect the privacy and autonomy of patients and families during rounds and goals of care conversations

**Systems based practice**

- Recognize and address barriers to care (access to healthy foods, medications, social situations) that may lead to poor patient outcomes

## Practice-based learning and improvement

### **Educational Strategies:**

Educational Strategy	Skills (taught and/or assessed)
<i>For example:</i> Bed side rounds	Clinical Reasoning Presentation skills Cardiac auscultation
<i>For example:</i> Didactic lecture	Reading EKGs Interpreting acid base disorders

### **Required Reading:**

(references)

### **Suggested Reading and/or Resources:**

(references, books, website, etc)

**Assessment Form (items 3 to 12 are evaluated in a 1-5 [or 'not observed'] scale)**

1. Please list 3 skills you observed the resident do well.
2. Please list 3 skills the resident should do differently, and HOW they should do it ?

(items 3 to 12 are evaluated in a 1-5 [or 'not observed'] scale)

1= cannot do this skill

2 = can do this with direct supervision

3 = can do this skill with indirect supervision

4 = can do this skill unsupervised

5 = has mastered this skill, can teach others this skill

3. Assess and describe volume status in patients to the Heart Failure service. PC-4, MK-2
4. Initiate, titrate, and direct plans of action regarding daily diuretic therapies based on data obtained from history, physical exam, laboratory, and imaging evaluation. PC-3 and 4, MK-2
5. Identify and address potential triggers for acute decompensation (e.g ischemia, arrhythmias, infection, non-adherence) in patients admitted with heart failure. PC-4, MK-1 and 2
6. Utilize guideline-based therapies for patients with chronic systolic heart failure (e.g. RASS inhibition, aldosterone antagonists, SGLT-2is, ICDs, BiV pacing) PC-4, MK-1 and 2, PBLI-1
7. Discriminate between heart failure with preserved and reduced ejection fraction, appreciating both similarities and differences in the way in which these diseases are managed. PC-4, MK-1, 2 and 3
8. Recognize the patient with low-output heart failure in whom inotropic or other advanced therapies may need to be considered. PC-4, MK-2
9. Evaluate and treat acute kidney injury from common cardiorenal etiologies (e.g. hypovolemia in a patient who has been over-diuresed, renal venous congestion in a patient who is volume overloaded, compromised renal perfusion in a patient who is in a low-output state. PC-4, MK-1, 2 and 3
10. Evaluate patients with newly diagnosed heart failure, and recommend appropriate initial steps in assessment and management. PC- 3 and 4, MK-2

11. Anticipate issues in the post-discharge care of heart failure patients, and facilitate disposition plans aimed at reducing the likelihood of readmission. PC-4, PBLI-1, SBP-1, 2 and 3
12. Recognize and address barriers to access (healthy foods, medications, social situations) that may adversely affect patient outcomes. PC-1, SBP-2 and 3, ICS-1
13. Demonstrate effective communication with patients and families by using shared decision making and closed loop communication skills in developing care plans. ICS-1, PROF-1
14. Appraise one article (original research or a review paper pertinent to heart failure medicine) and incorporate knowledge into patient care. PBLI-1 and 2, PC-4, MK-3
15. Demonstrate sensitivity and respect for the privacy, autonomy, and diversity (including but not limited to diversity on gender, age, culture, race, religion, disabilities and sexual orientation) of patients and families during procedures, daily updates and discussions regarding goals of care. PROF-1, 2, ICS-1