Congestive Heart Failure

Two types:

HFpEF (diastolic HF)-heart failure with preserved ejection fraction-normal or near normal EF (45% and above)

- Guidelines outpatient management of HFpEF includes: (these are guidelines and may differ from patient to patient)
    1. Beta-Blockers
    2. Diuretics
    3. Mineralocorticord receptor antagonists-spironolactone(if renal function allows)
    4. CCB/ACE/ARB-for blood pressure control-(no proven benefit of adding these medications if hypertension is NOT an issue)

HFrEF (systolic HF)-heart failure with reduced ejection fraction-Reduced EF (45% or below)

(You will read varying ranges on EF in regards to different types of HF)

- Guidelines outpatient management of HFrEF includes: (these are guidelines and may differ from patient to patient)
    1. Beta-Blockers
    2. Diuretics
    3. Mineralocorticord receptor antagonists-spironolactone(if renal function allows)
    4. ACE/ARB or Entresto (sacubitril/valsartan)-which just received a class I recommendation to reduce hospital admission and death for NYHA class II-IV
    5. CCB, nitrates or hydralazine-if needed for BP control
    6. Corlanor (Ivabradine) can be added for patients who are persistently tachycardic despite BB. (contradicted in patients with Afib)

Since IV diuretics provide better dieresis sometimes a short admission for dieresis is necessary especially when outpatient treatment is failed.

General rule to transition home diuretics to IV:

- Transition oral Furosemide dose to Furosemide IV at a 1:1 ratio for example if on Furosemide 40mg po at home-convert to Furosemide 40mg IV
- Transition oral Torsemide dose to IV Furosemide at a 2:1 ratio for example if on Torsemide 40mg po at home then transition to Furosemide 80mg IV
- Transition oral Bumetanide 1mg dose to Furosemide 40mg IV

Dose every 6 to every 8 hours. Check BMP every 12 hours and prior to discharge.

Replace potassium as needed. Replace potassium with preferably oral (better absorption)

Increase home oral diuretics for two to three days post discharge with close follow up with PCP or Cardiology.

At discharge encourage:

- daily weights
- fluid restriction of 64oz per day
- less than 2 gms of sodium per day
- Follow up with cardiology in 3-7 days (If established patient of Trihealth Heart Institute please call the rounding service and they will be happy to get the patient an appt prior to discharge)
- Recommend calling office with weight gain of more than 2-3 lbs in 24 hours or 5 lbs in a week.

Further definition of classes of HF

Classes of Heart Failure-based on patient reported symptoms.

I	No limitation of physical activity. Ordinary physical activity does not cause undue fatigue, palpitation, dyspnea (shortness of breath).
II	Slight limitation of physical activity. Comfortable at rest. Ordinary physical activity results in fatigue, palpitation, dyspnea (shortness of breath).
III	Marked limitation of physical activity. Comfortable at rest. Less than ordinary activity causes fatigue, palpitation, or dyspnea.
IV	Unable to carry on any physical activity without discomfort. Symptoms of heart failure at rest. If any physical activity is undertaken, discomfort increases.

References:

Colucci, WS. Overview of the therapy of heart failure with reduced ejection fraction In: UpToDate, Downey BC. (Accessed on November 12,2016.)

Borlaug, BA. Treatment and prognosis of heart failure with preserved ejection fraction. In: UpToDate, Downey BC. (Accessed on November 12,2016.)