Provider notified of change in condition and you suspect HF Exacerbation.

If hypoxemic, start oxygen with target $O_2$ Sat > 90%

Initiate or Enhance Treatment

- Need systolic blood pressure > 90 mmHg and adequate peripheral perfusion
  - Caution when starting or increasing diuretics in patients with diastolic HF.

1. Patients already on oral loop diuretic consider 2x the previous oral dose for up to 3 days
2. If not already on diuretic regimen, start on loop diuretic for up to 3 days:
   - torsemide - 20 mg PO daily
   - furosemide - 40 mg PO BID
   - bumetanide - 1 mg PO daily
3. If patient is not adequately diuresed with the loop diuretic alone, consider other diuretic:
   - metolazone 2.5 PO daily/ 1-2 times a week
   - hydrochlorothiazide 25 mg PO daily
   - Consider addition of aldosterone antagonist in patients with low or low-normal serum potassium:
     - spironolactone - 12.5 PO daily

Initiate monitoring orders: vital signs 3 times daily throughout diagnosis and treatment periods, with daily weights and nursing assessments.

Re-evaluate within 24-72 hours. Is patient improving?

Re-evaluate and start on/modify (if needed) chronic HF management
- Review adherence to usual regimen
- Order routine weight checks
- Recommend smoking cessation
- Evaluate patient’s daily sodium intake and recommend <2g/day

- Administer vaccinations per recommendation
  - influenza and pneumococcal (both PSV-23 and PCV-13)
- Consider an aerobic physical conditioning regimen
- Facilitate advance care planning/POST conversation

Certify for OPTIMISTIC enhanced billing using CMS criteria (see back)

Differential Diagnoses

- COPD
- Pneumonia
- Pulmonary embolism
- Pneumothorax
- Acute coronary syndromes
- Hypertensive urgency
- Arrhythmia

Tests to Consider

- CXR
- BNP
- CBC
- CMP
- EKG
- Echo

YES

NO

- If patient is on furosemide, consider switching to torsemide
- Consider alternate diagnosis
- Review overall goals of care and consider transfer to hospital
Special Considerations

- Frequent electrolyte monitoring
- Potential for severe hypokalemia in patients on high dose of loop diuretics or a loop-thiazide combination
- Review patient’s goals of care including POST form and hospitalization preferences

CMS Certification Criteria for HF

<table>
<thead>
<tr>
<th>CHF exacerbation (up to 7 days)</th>
<th>One or more of the following:</th>
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<tbody>
<tr>
<td></td>
<td>Chest X-ray confirmation of a new pulmonary congestion, edema, or bilateral pleural effusions.</td>
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<td>OR Two or more of the following:</td>
<td>02 set level ≤ 92% on room air or on usual oxygen settings in patients with chronic 02 requirements.</td>
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<td>New or worsening pulmonary edema</td>
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<tr>
<td></td>
<td>New or worsening edema</td>
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<td>New or increased jugulo-venous distension</td>
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<td>In the absence of renal failure, BNP ≥ 100 pg/ml or NTproBNP ≥ 900 pg/ml (GFR ≤ 60 ml/min/1.73m²)</td>
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<td>Weight gain of 3 lbs. or more in one day or 5 lbs. in one week.</td>
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</tbody>
</table>

These are recommendations from expert consensus and an extensive literature review, including the AMDA Clinical Practice Guidelines. In practice, use your clinical judgements for individual patient care.