

**NQF-ENDORSED VOLUNTARY CONSENSUS STANDARDS FOR HOSPITAL CARE**  
**Measure Information Form**

**Measure Set:** Heart Failure (HF)

**Set Measure ID#:** HF-2

**Performance Measure Name:** Evaluation of LVS Function

**Description:** Heart failure patients with documentation in the hospital record that left ventricular systolic (LVS) function was evaluated before arrival, during hospitalization, or is planned for after discharge.

**Rationale:** Appropriate selection of medications to reduce morbidity and mortality in heart failure requires the identification of patients with impaired left ventricular systolic function. National guidelines advocate the evaluation of left ventricular systolic function as the single most important diagnostic test in the management of all patients with heart failure (Yancy, 2013 and HFSA, 2010).

**Type of Measure:** Process

**Improvement Noted As:** An increase in the rate

**Numerator Statement:** Heart failure patients with documentation in the hospital record that LVS function was evaluated before arrival, during hospitalization, or is planned for after discharge.

**Included Populations:** Not Applicable

**Excluded Populations:** None

**Data Elements:**  
*LVF Assessment*

**Denominator Statement:** Heart failure patients.

**Included Populations:**

Discharges with an *ICD-9-CM Principal Diagnosis Code* for heart failure as defined in Appendix A, Table 2.1

**Excluded Populations:**

- Patients who had a left ventricular assistive device (LVAD) or heart transplant procedure during hospital stay (ICD-9-CM procedure code for LVAD and heart transplant as defined in Appendix A, Table 2.2)
- Patients less than 18 years of age

- Patients who have a Length of Stay greater than 120 days
- Patients enrolled in clinical trials
- Patients discharged to another hospital
- Patients who left against medical advice
- Patients who expired
- Patients discharged to home for hospice care
- Patients discharged to a health care facility for hospice care
- Patients with *Comfort Measures Only* documented
- Patients with reasons documented by a physician/advanced practice nurse/physician assistant for no LVS function evaluation

**Data Elements:**

- *Admission Date*
- *Birthdate*
- *Clinical Trial*
- *Comfort Measures Only*
- *Discharge Date*
- *Discharge Disposition*
- *ICD-9-CM Other Procedure Codes*
- *ICD-9-CM Principal Diagnosis Code*
- *ICD-9-CM Principal Procedure Code*
- *LVF Assessment*

**Risk Adjustment:** No

**Data Collection Approach:** Retrospective data sources for required data elements include administrative data and medical record documents. Some hospitals may prefer to gather data concurrently by identifying patients in the population of interest. This approach provides opportunities for improvement at the point of care/service. However, complete documentation includes the principal or other ICD-9-CM diagnosis and procedure codes, which require retrospective data entry.

**Data Accuracy:** Variation may exist in the assignment of ICD-9-CM codes; therefore, coding practices may require evaluation to ensure consistency.

**Measure Analysis Suggestions:** None

**Sampling:** Yes, please refer to the measure set specific sampling requirements and for additional information see the Population and Sampling Specifications Section.

**Data Reported As:** Aggregate rate generated from count data reported as a proportion

**Selected References:**

- Bonow RO, Ganiats TG, Beam CT, Blake K, Casey DE Jr, Goodlin SJ, et al. ACCF/AHA/AMA-PCPI 2011 performance measures for adults with heart failure: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Performance Measures and the American Medical

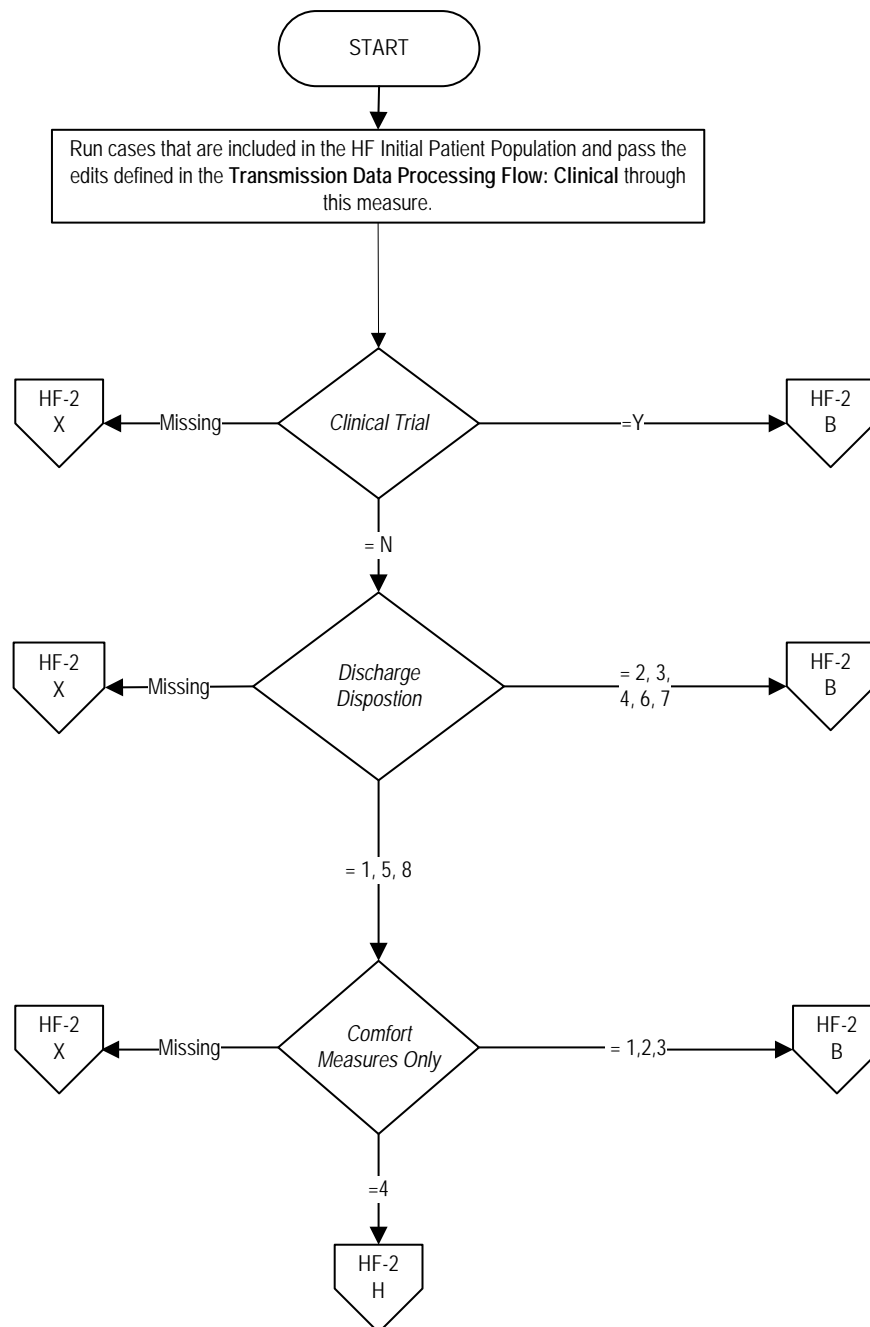
Association-Physician Consortium for Performance Improvement. *J Am Coll Cardiol* 2012;59:1812–32.

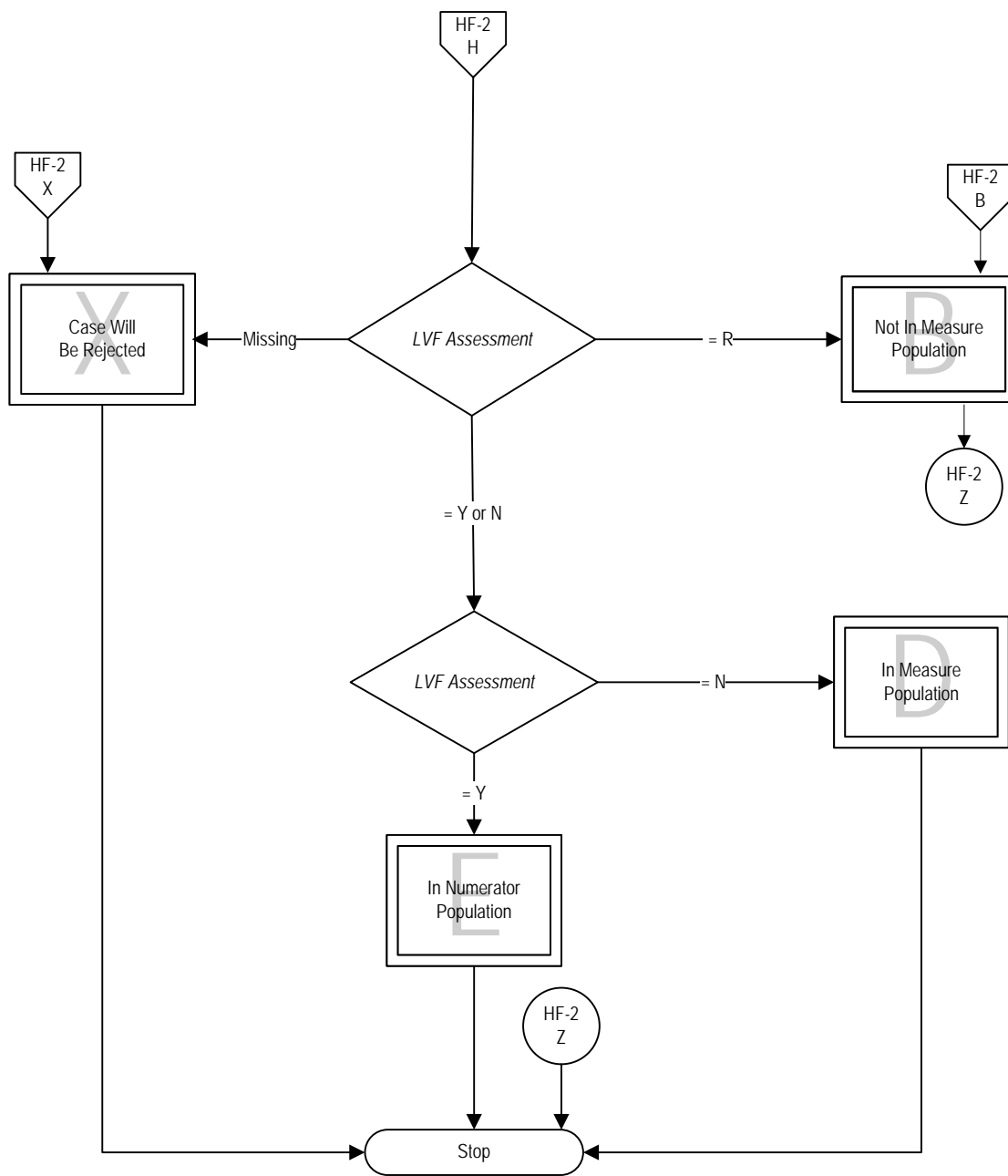
- Lindenfeld J, Albert NM, Boehmer JP, Collins SP, Ezekowitz JA, Givertz MM, et al. Executive Summary: HFSA 2010 Comprehensive Heart Failure Practice Guideline. *J Card Fail* 2010;16:475-539.
- Yancy CW, Jessup M, Bozkurt B, Butler J, Casey DE Jr, Drazner MH, et al. 2013 ACCF/AHA guideline for the management of heart failure: executive summary: a report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. *J Am Coll Cardiol* 2013;62:1495–539.

## HF-2: Evaluation of LVS Function

**Numerator:** Heart failure patients with documentation in the hospital record that LVS function was evaluated before arrival, during hospitalization, or is planned for after discharge.

**Denominator:** Heart failure patients.





## Heart Failure (HF)-2: Evaluation of Left Ventricular Systolic Function

**Numerator:** Heart failure patients with documentation in the hospital record that Left Ventricular Systolic function was evaluated before arrival, during hospitalization, or is planned for after discharge.

**Denominator:** Heart failure patients.

1. Start processing. Run cases that are included in the Heart Failure Initial Patient Population and pass the edits defined in the Transmission Data Processing Flow: Clinical through this measure.
2. Check Clinical Trial
  - a. If Clinical Trial is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
  - b. If Clinical Trial equals Yes, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
  - c. If Clinical Trial equals No, continue processing and proceed to Discharge Disposition.
3. Check Discharge Disposition
  - a. If Discharge Disposition is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
  - b. If Discharge Disposition equals 2, 3, 4, 6 or 7, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
  - c. If Discharge Disposition equals 1, 5 or 8, continue processing and proceed to Comfort Measures Only.
4. Check Comfort Measures Only
  - a. If Comfort Measures Only is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
  - b. If Comfort Measures Only equals 1, 2 or 3, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
  - c. If Comfort Measures Only equals 4, continue processing and proceed to Left Ventricular Function (LVF) Assessment.
5. Check LVF Assessment

- a. If LVF Assessment is missing, the case will proceed to a Measure Category Assignment of X and will be rejected. Stop processing.
- b. If LVF Assessment equals R, the case will proceed to a Measure Category Assignment of B and will not be in the measure population. Stop processing.
- c. If LVF Assessment equals No, the case will proceed to a Measure Category Assignment of D and will be in the Measure Population. Stop processing.
- d. If LVF Assessment equals Yes, the case will proceed to a Measure Category Assignment of E and will be in the Numerator Population. Stop processing.