

Creating a patient list of IV iron repletion candidates with HFrEF

*Epic®

**This example is Epic-specific, but the principles are meant to be applicable to all EHR vendors and usable by any local healthcare IT/clinical team*

A patient list, in Epic, is a system list that can be used to identify patients meeting certain criteria. Available criteria can include diagnosis, current and prior medications, lab values and other clinical or patient demographic information.

Patient lists can be created to identify heart failure patients whom clinicians may determine are appropriate candidates for treatment with IV iron products such as ferric carboxymaltose or iron sucrose.

Examples of clinical criteria to include in the search are:

- Recent hemoglobin
- Recent serum ferritin
- Recent TSAT
- Current guideline-directed therapy regimen
- Ejection fraction (must be recorded in EHR as a data value and not as part of a textual report)

Institution-specific electronic health records (EHRs), including Epic, may have pre-existing population health registries that identify patients with heart failure based on ICD.10 codes.

Alternatively, Patient Lists can be created through two criteria – one by diagnosis and another by discrete clinical data stored in the EHR (i.e. medication, ejection fraction percentage). A manual review of the chart for the patients listed in the Patient Lists results is necessary to determine if the treatment path is appropriate.

The following illustrates three scenarios for running a Patient List to identify patients with heart failure who may be candidates for IV iron repletion.

- Stratum 1: Population health (at-risk)
- Stratum 2: Recently discharged
- Stratum 3: Currently hospitalized (index hospitalization, based on AFFIRM-AHF schema)

Configuration of Patient List is typically managed by the integrated delivery system (IDS) EHR support team. When making an IT request to set up the report, consider including the following information to ensure that the report is appropriately configured. **Individuals can also create a custom report through Workbench in Epic.**

Example 1: Create a patient list based on population health registry

- Navigate to My Reports, Library, search **Disease Registry** in search box at tope
- From the list produced, select **Patient Disease Registry Search** and select **+New Report**

Patient Disease Registry Search

Reports from this template

- From the Patient Registry Tab, click magnifying glass to search for heart failure patient registry
- Select appropriate registry and change **Criterion Logic** from **OR** to **AND**

Registries

Patient registries	
1	HF RE-ADMISSIONS REDUCTION PROGRAM REGISTRY [100146]
2	<input type="text"/>

Criterion Logic **AND**

- In the **Find Criteria** Box, search for **Lab Value Metric** and change **Criterion Logic** from **OR** to **AND**
 - Select Hemoglobin as value metric
 - Select less than or equal to as relationship
 - Select 13 as value

Lab value metrics

	Lab Value Metric	Relationship	Value
1	DM LAB LAST HEMOGLOBIN	Less than or equal to	13
2	<input type="text"/>	<input type="text"/>	<input type="text"/>

- If lab value metric not available, select **Add New Criteria** under **Find Criteria**
- Click **Property** and **Last Lab Value**
 - Select Ferritin as common name
 - Select less than or equal to as relationship
 - Select 100 as value for absolute iron deficiency OR
 - Select 300 as value for functional iron deficiency
 - If querying functional iron deficiency, add TSAT as additional lab value
 - Select less than or equal as relationship
 - Select 20 as value

Find Patients in Registries ⓘ

Find Criteria

1 HF RE-ADMISSIONS REDUCTION PROGRAM REGISTRY [100146]

2

Criterion Logic **AND**

Lab value metrics ⬆️ ⓘ 🗑️

	Lab Value Metric	Relationship	Value
1	DM LAB LAST HEMOGLOBIN	Less than or equal to	13
2	<input type="text"/>	<input type="text"/>	<input type="text"/>

Criterion Logic **AND**

Last Lab Value ⬆️ ⓘ 🗑️

	Base Names	Common Names	Lab Components Grouper	LOINC Code Grouper
1		Ferritin		
2		TSAT		
3	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>

Report Logic **AND**

- Repeat steps with **ejection fraction** and desired cutoff if data point available in EHR
- Select **Run**. The Patient List is displayed and can be filtered and arranged as desired.

Using these criteria, a Patient List can be created to identify all patients with heart failure and 1) absolute iron deficiency or 2) functional iron deficiency.

Clinicians should choose the criteria that are most appropriate for patient population.

Example 2: Create a patient list based on recent discharges

This report requires an existing list based on registry criteria to identify patients discharged within a pre-specified time period (e.g. 7 days, 30 days) after a hospitalization for acute decompensated heart failure

- Navigate to My Reports, Library, search **Discharge (or other key words)** in search box at tope
- Select institution-specific list and select **Edit**
- In the **Find Criteria** Box, search for **Lab: Resulted Component**
 - Select Hemoglobin as component base name
 - Select 13 as maximum value
 - Select Ferritin as component base name
 - Select 100 as value for absolute iron deficiency OR
 - Select 300 as value for functional iron deficiency
 - If querying functional iron deficiency, add TSAT as additional lab value
 - Select 20 as maximum value

Report Settings - MMC IP HF Readmissions Program - Recently Discharged Patients [1461798]

Criteria Display Appearance Summary Print Layout Toolbar Override General

Find Patients ⓘ

Find Criteria Enter a search term, or click the search icon to browse available criteria

Discharged Patients by Hospital

Hospital: MOSES HOSPITAL and Lookback Days: 7 and Discharge Date From: (none) and Discharge Date To: (none) and ADT Status: Discharged OR

Hospital: WAKEFIELD HOSPITAL and Lookback Days: 7 and Discharge Date From: (none) and Discharge Date To: (none) and ADT Status: Discharged OR

Hospital: WEILER HOSPITAL and Lookback Days: 7 and Discharge Date From: (none) and Discharge Date To: (none) and ADT Status: Discharged

Evaluate rule

Rule: MMC HF PRINCIPAL PROBLEM OR PRIMARY DIAGNOSIS IN HAR and Data source: All and Data type and combine logic: (none) and External metric id: (none) and Evaluate rule: 1

Lab: Resulted Component

	Component Base Name	Minimum Value	Maximum Value	Lookback Hours
1	HEMOGLOBIN		13	
2	FERRITIN		300	
3	TSAT		20	
4	No matches found			

Criterion Logic OR

Report Logic AND

Show search summary

Run Save Save As Restore Close

Using these criteria, a Patient List can be created to identify all patients recently discharged after hospitalization for acute decompensated heart failure and 1) absolute iron deficiency or 2) functional iron deficiency.

Clinicians should choose the criteria that are most appropriate for patient population.

Example 3: Create a patient list based on inpatient census (index hospitalization, based on AFFIRM-AHF schema)

This report requires an existing inpatient census based on registry criteria to identify current hospitalized patients with a history of heart failure

- Navigate to My Reports, Library, search **Census (or other key words)** in search box at tope
- Select institution-specific list and select **Edit**
- In the **Find Criteria** Box, search for **Lab: Resulted Component**
 - Select Hemoglobin as component base name
 - Select 13 as maximum value
 - Select Ferritin as component base name
 - Select 100 as value for absolute iron deficiency OR
 - Select 300 as value for functional iron deficiency
 - If querying functional iron deficiency, add TSAT as additional lab value
 - Select 20 as maximum value

Report Settings - MMC IP Admitted Patients with Heart Failure- HF Census Report [730250]

Criteria Display Appearance Summary Print Layout Toolbar Override General

Find Patients ⓘ

Find Criteria Enter a search term, or click the search icon to browse available criteria

Admitted Patients by Hospital

MOSES HOSPITAL OR
WEILER HOSPITAL OR
WAKEFIELD HOSPITAL

Is on registry

Registry id: HF RE-ADMISSIONS REDUCTION PROGRAM REGISTRY and Registry grouper: (none) and Is on registry: Yes

Lab: Resulted Component

	Component Base Name	Minimum Value	Maximum Value	Lookback Hours
1	HEMOGLOBIN		13	
2	FERRITIN		100	
3				

Criterion Logic OR

User Authorized Service Areas

Report Logic AND

Show search summary

Run Save Save As Restore Close

Using these criteria, a Patient List can be created to identify all patients currently hospitalized with a history of chronic heart failure and 1) absolute iron deficiency or 2) functional iron deficiency.

Clinicians should choose the criteria that are most appropriate for patient population.