



Iron deficiency with or without anemia: an underappreciated cause of readmissions in heart failure with reduced ejection fraction (Quality Improvement Initiative)

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Background

- Iron deficiency is a common comorbidity in patients with heart failure with reduced ejection fraction (HFrEF) and is associated with reduced quality of life and exercise capacity.
- A retrospective analysis from the EVEREST trial showed that anemia is prevalent in patients hospitalized for worsening HFrEF and is associated with a worse outcome.
- Data from AFFIRM-AHF show that treatment with IV iron after a hospitalization for acute HFrEF reduced the risk of readmission in patients with HFrEF and iron deficiency with or without manifested anemia.
- Although our admission order sets for acute HFrEF include ordering iron studies for a hemoglobin less than 11 g/dL, it was unclear whether these order sets were being appropriately utilized.

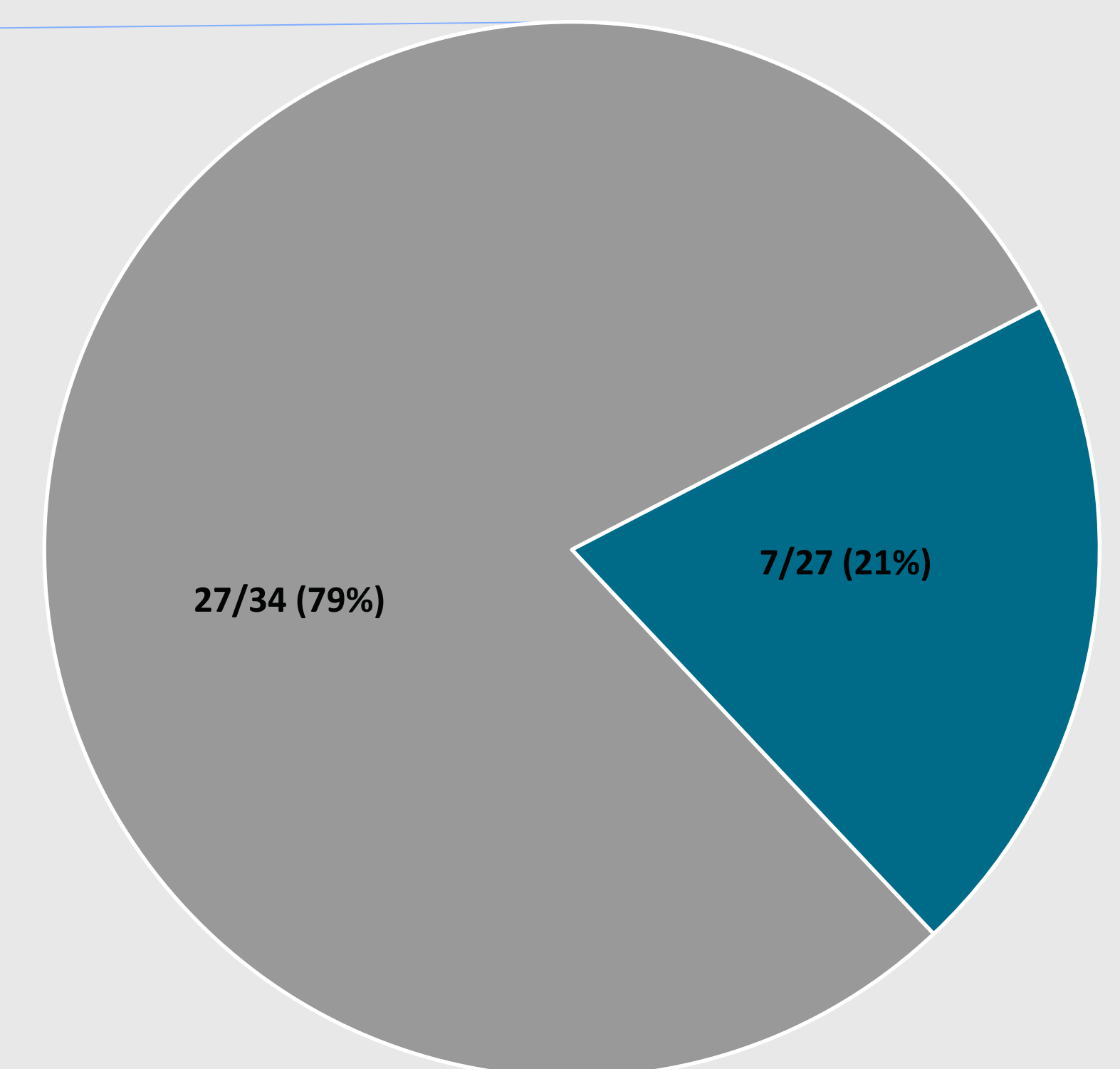
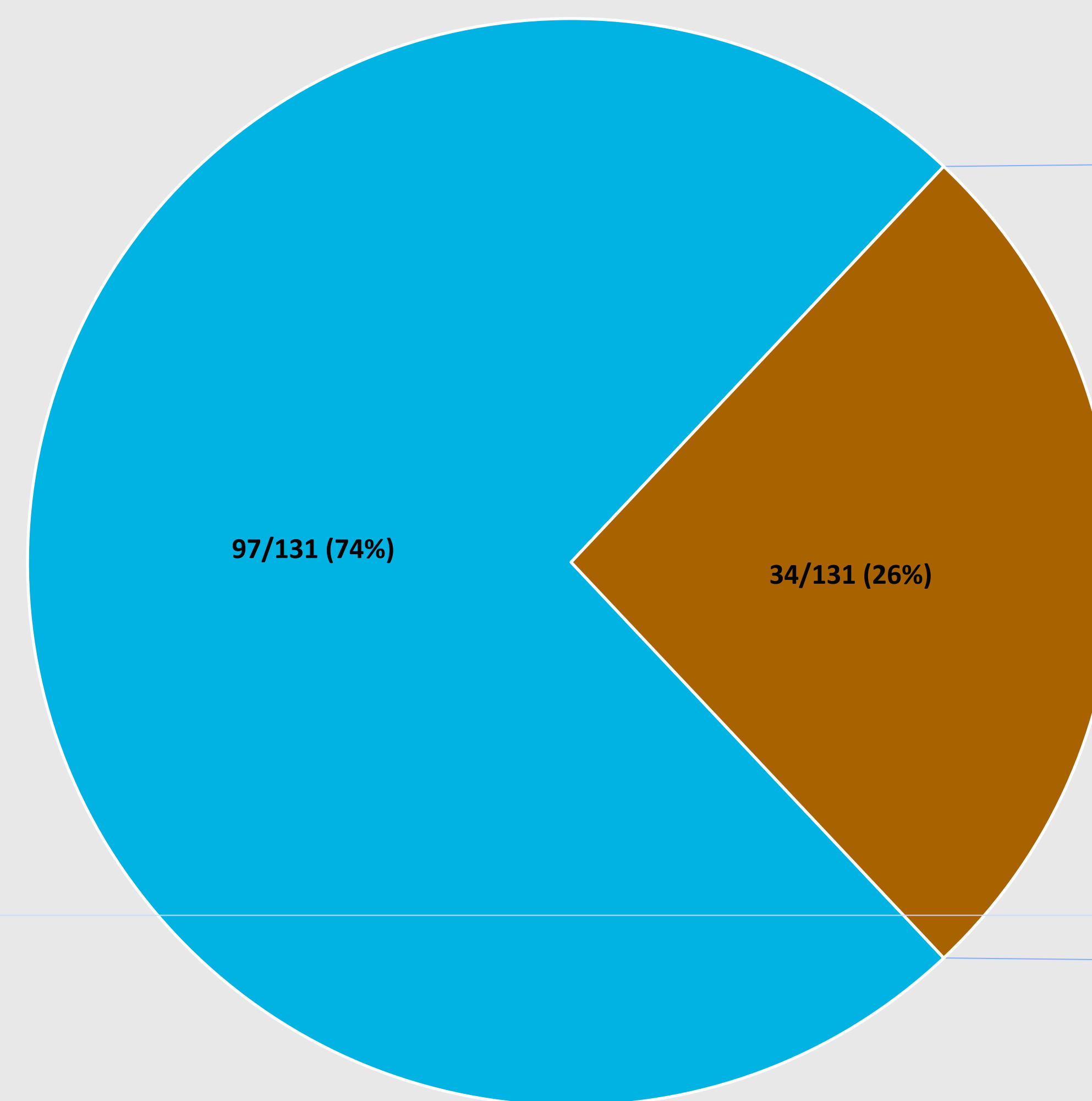
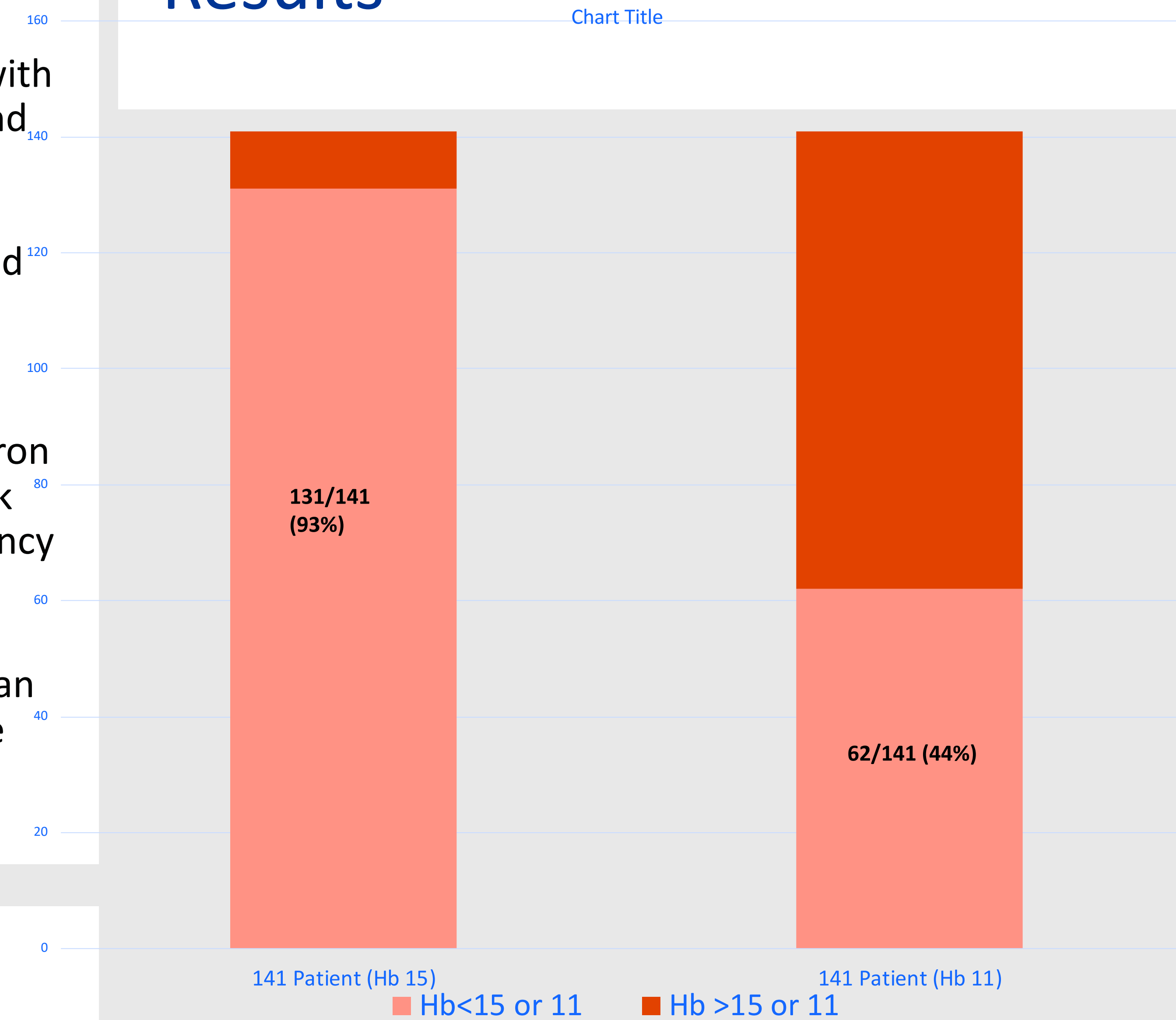
Objective

- We hypothesized that iron deficiency is an under-recognized and undertreated possible contributor to HFrEF readmissions.

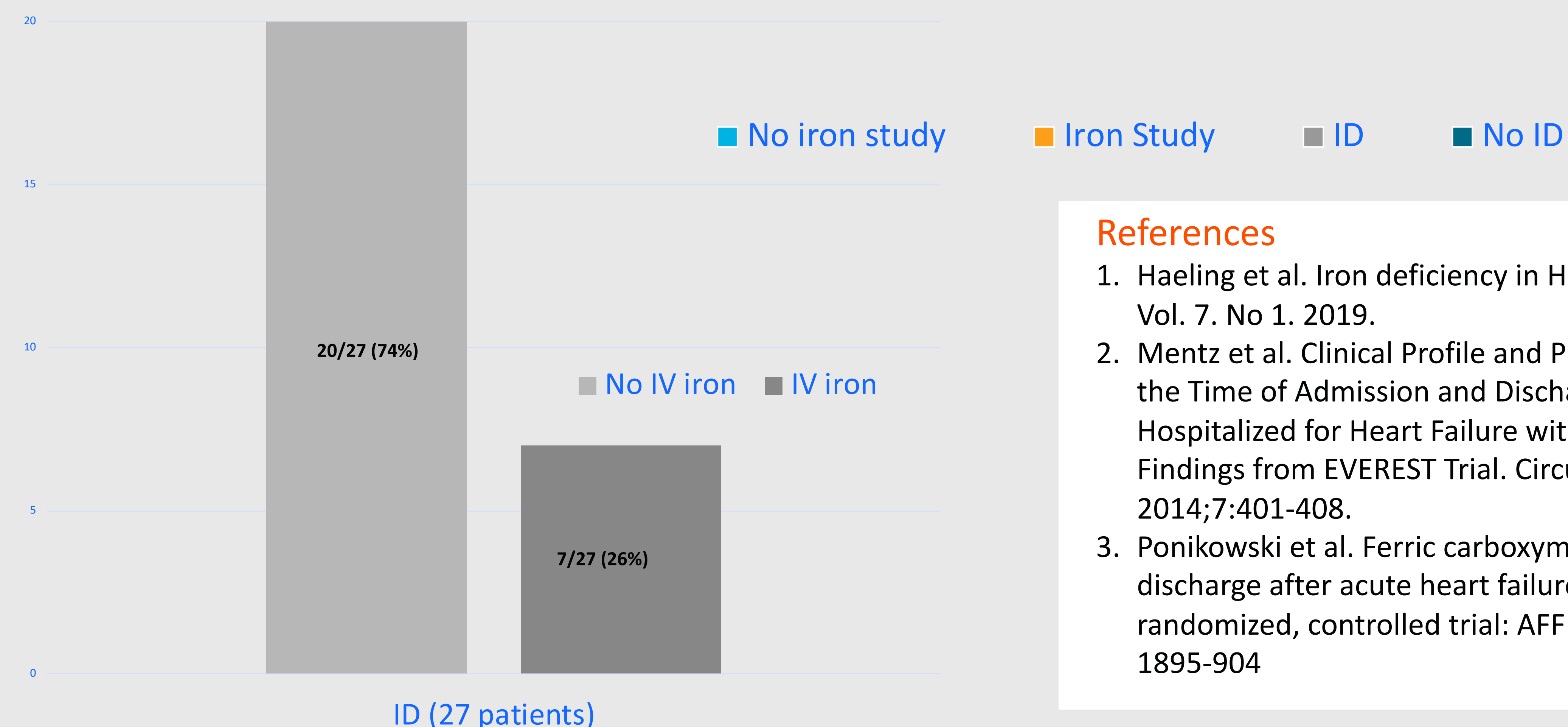
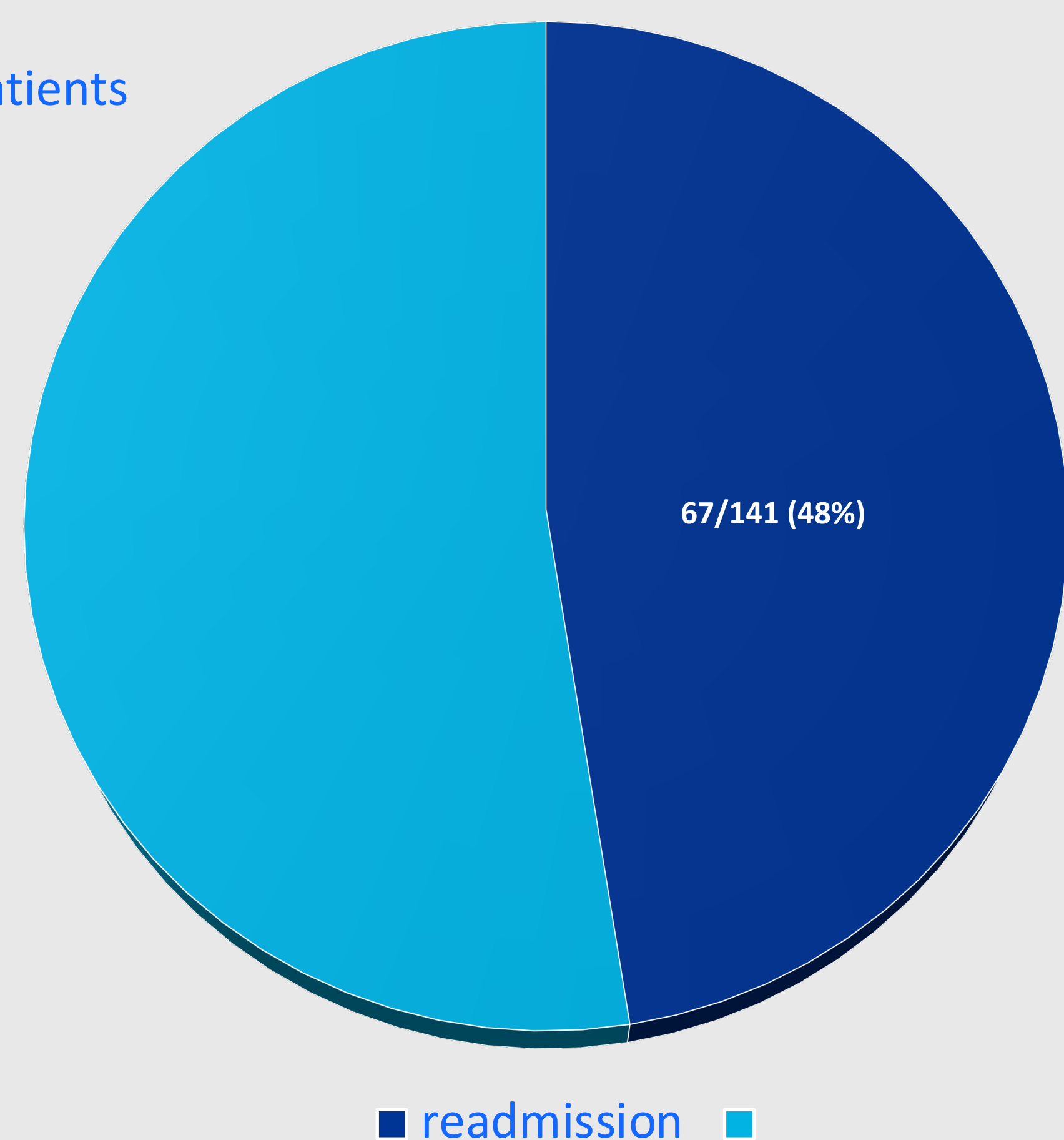
Methods

- To identify the factors contributing to 30 days readmissions for HFrEF, the Clinical Performance Improvement (CPI) committee reviewed potential clinical contributors with the help of tools and methodologies from the Summa Health Quality Department.
- We reviewed the primary diagnosis for a 30-day readmission in 141 patients with a prior index admission for acute HFrEF, between Jan 2019 and April 2020.

Results



141 Patients



Conclusions

- Our findings show that iron deficiency with and without anemia is an under-recognized and under-treated condition and a possible cause of hospital readmissions in patients with HFrEF.
- To improve compliance with screening for iron deficiency regardless of anemia, we have raised awareness of the importance of checking for iron deficiency.
- In addition, to increase the appropriate treatment in patients admitted with acute HFrEF, we have launched an algorithm for IV iron replacement in HFrEF patients who meet above mentioned iron deficiency criteria.

References

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