

# Implementation of a Functional Capacity Assessment in Adults with Heart Failure

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## Problem Statement

- The problem is lack of an objective measurement and limited documentation of functional capacity in adult patients with heart failure (HF) in a transitional care clinic (TCC).
- Practice Change - Implement the 60-foot walk test in the TCC to assist in identification of high-risk HF patients and target them for resources that may reduce health status decline and readmissions.

## Purpose

- Estimated 6.2 million American adults are diagnosed with heart failure (HF).
- HF remains a leading diagnosis for hospitalization and early readmission, including at the project practice site and associated hospitals.
- A best practice in clinical management of HF patients is to assign a New York Heart Association (NYHA) functional class of I-IV based on activity and associated severity of symptoms.
- Patients with HF who exhibit poor functional ability are identified as high-risk for health status decline and/or early hospital readmission.
- An objective assessment of functional capacity is important for individualizing treatment plans and improving outcomes.
- The established 6-minute walk test is timely and difficult for HF patients to complete. The 60-foot walk test provides a real-time objective assessment of functional capacity. A walk time of > 30 seconds identifies HF patients at increased risk for hospitalization and/or health status decline.

## Objectives

### Short-term goals

- Educate staff and providers in the TCC on the importance of functional capacity assessment and assignment of NYHA functional class, and the performance of the 60-foot walk test.
- Perform the 60-foot walk test on all patients referred to the TCC after a hospitalization for heart failure.
- Use walk test data (> 30 seconds) to identify patients at increased risk for readmission or health status decline, provide additional resources / monitoring.
- Document walk test data and NYHA functional class in the medical record.

### Long-term goal

- Assess 30-day readmission reduction data pre and post implementation.

## Methods

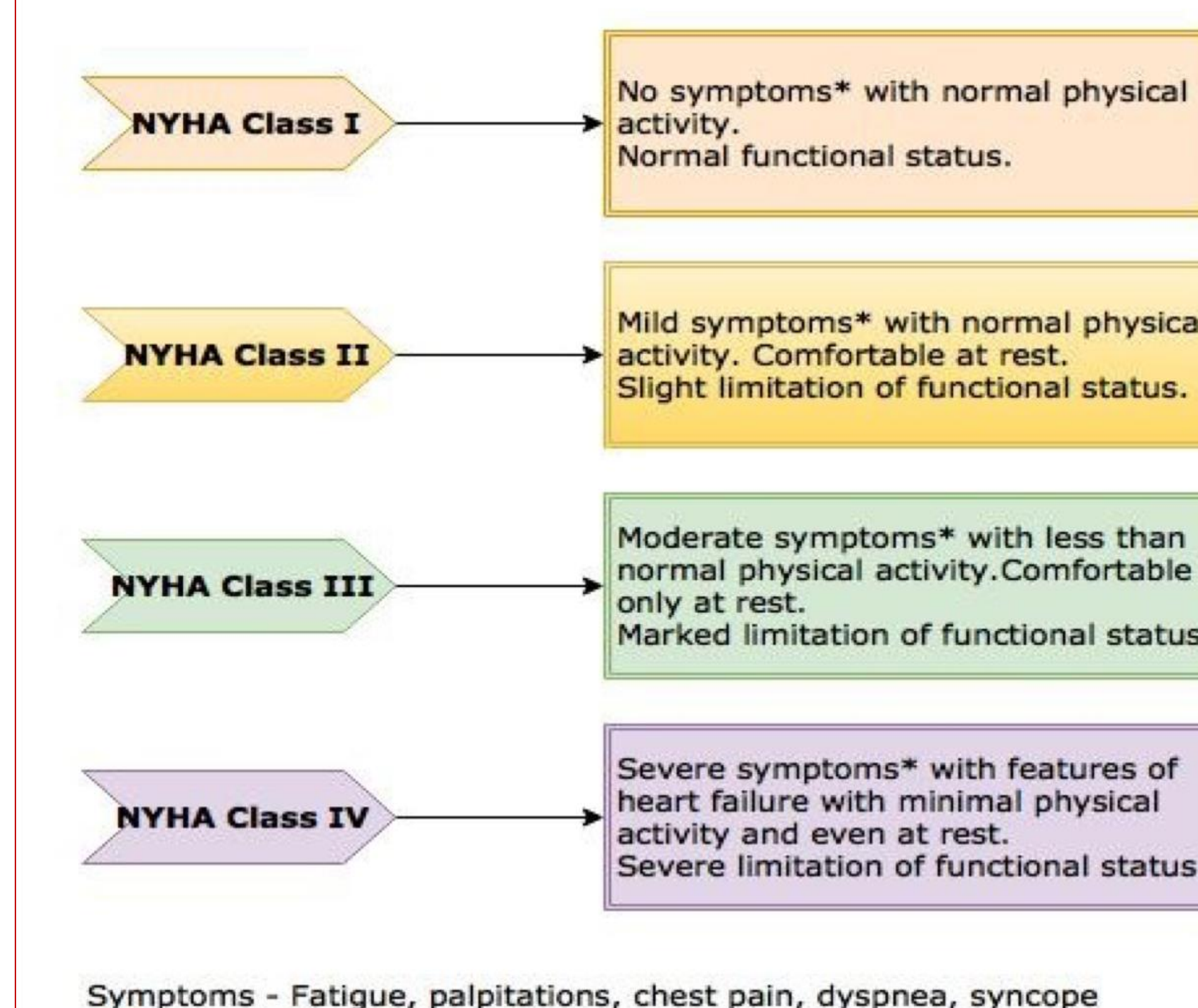
- Quality Improvement Project
- 12-week implementation period in a community hospital-based transitional care clinic (TCC)
- Key interventions of walk test completion and documentation of NYHA functional class
- Analysis by percent change pre- and post-implementation

## Participants

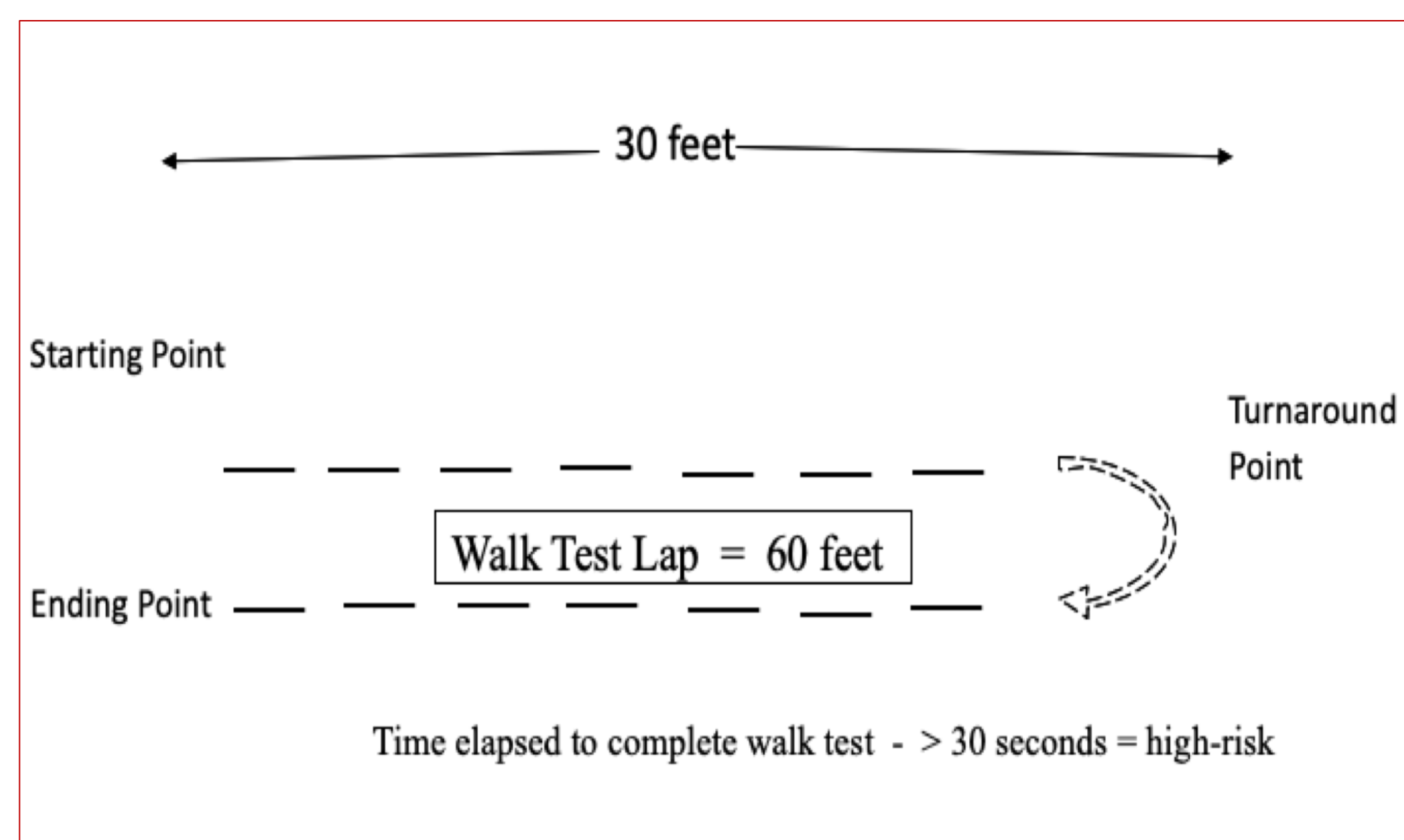
- Patients with Heart Failure after hospitalization referred to the transitional care clinic (TCC)
- Willing / able to perform the walking test

## Interventions

### New York Heart Association (NYHA) Classification of severity of Heart Failure

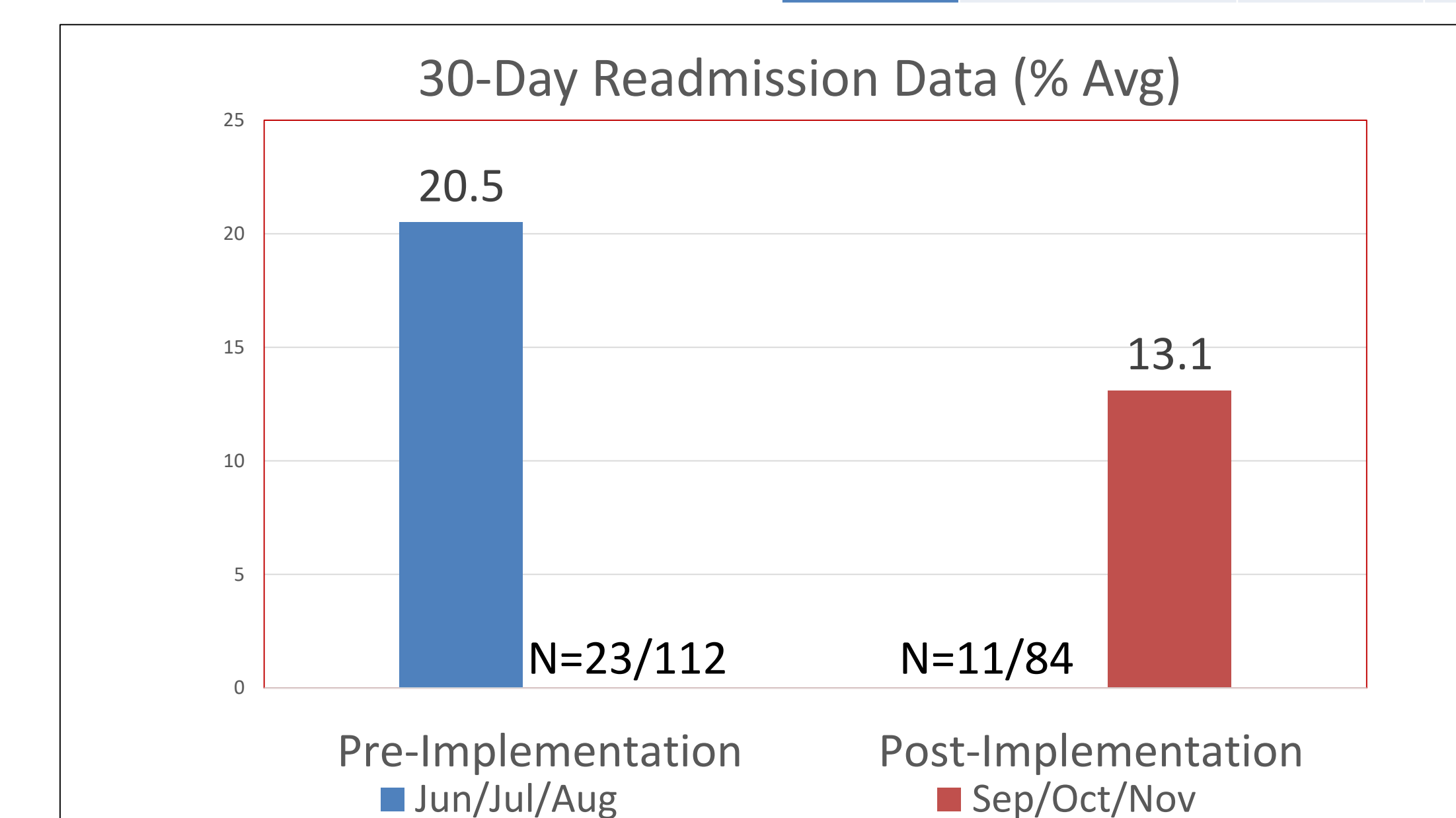


## The 60-Foot Walk Test



## Results

Completion of Walk Test				Documentation of NYHA Class			
Month	# completed walk test	# seen in clinic	% performed test	Month	# documented NYHA class	# seen in clinic	% documented NYHA class
Sept	22	32	69	Sept	21	32	66
Oct	27	31	87	Oct	26	31	84
Nov	18	21	86	Nov	17	21	81
Overall totals	67	84	80	Overall totals	64	84	76



## Discussion

- The walk test was completed by 80% (67/84) HF patients - the goal of 100% was not met as some patients were physically unable to perform the test.
- The number of patients identified at high risk was 24% (20/84).
- The number of patients that were readmitted within thirty days was 13% (11/84), and 64% of these (7/11) were identified as high risk.
- NYHA class was documented in 76% (64/84) of patient charts – the goal of 100% was not met.
- Three month average of 30-day readmissions was reduced by 7.4%.

## Conclusions

- The 60-foot walk test is a tool that can be used to assess functional capacity in real-time in an outpatient setting to identify HF patients at high risk for readmission. Interventions aimed towards these patients can improve outcomes such as reduction in 30-day readmissions.
- Implications for future practice / QI project/ Sustainability – possible use in other health conditions such as chronic obstructive pulmonary disease.

## References

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2. McCabe, N., Butler, J., Dunbar, S., Higgins, M. & Reilly, C. (2017). Six-minute walk distance predicts 30-day readmission after acute heart failure hospitalization. *Heart & Lung*, 46, 287-292. doi:10/1016/j.hrtlng.2017.04.001
3. Tabata, S., Noda, C. & Masuda, T. (2014). Six-minute walk distance is an independent predictor of hospital readmission in patients with chronic heart failure. *International Heart Journal*, 55(4), 331-336.