

# FAST-5: A frontline nurse-designed tool to predict inpatient fall risk



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## Background

- Morse Fall Scale (MFS), the fall predictive tool showed minimal historical fall risk predictability of 9.8% in our patient population
- Based on our performance and review of nursing literature, it was felt reasonable to explore options to predict fall risk more accurately
- FAST-5 Predictive Tool was developed by frontline staff

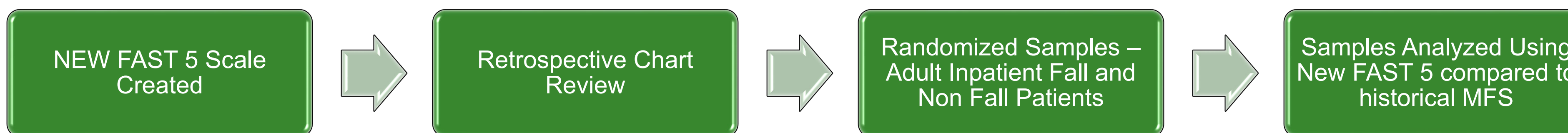
## Purpose

To explore if FAST-5, versus usual care (MFS), was a more accurate tool to predict patient falls.

## The FAST-5 Tool

- Decline in functional status?
- Dizziness or known conditions that can cause it?
- Active IV infusion(s)?
- Confused (or has dementia)?
- Medications that can alter balance?
- Is patient impulsive?

**Low Risk = 0-1 Points**  
**Moderate Risk = 2-4 Points**  
**High Risk = 4+ Points**



## Methods

- Retrospective chart review of sample of identified fall patients (n=188) as well as a random sample of non-fall patients (n=199)
- Sample included acute care inpatients, mean age 64 years (SD=19), 47% male, 53% female.
- MFS was analyzed for each patient as well as a retrospective scoring using the newly developed Fast-5 Tool.
- Descriptive statistics were performed and reported as frequencies and percentages.

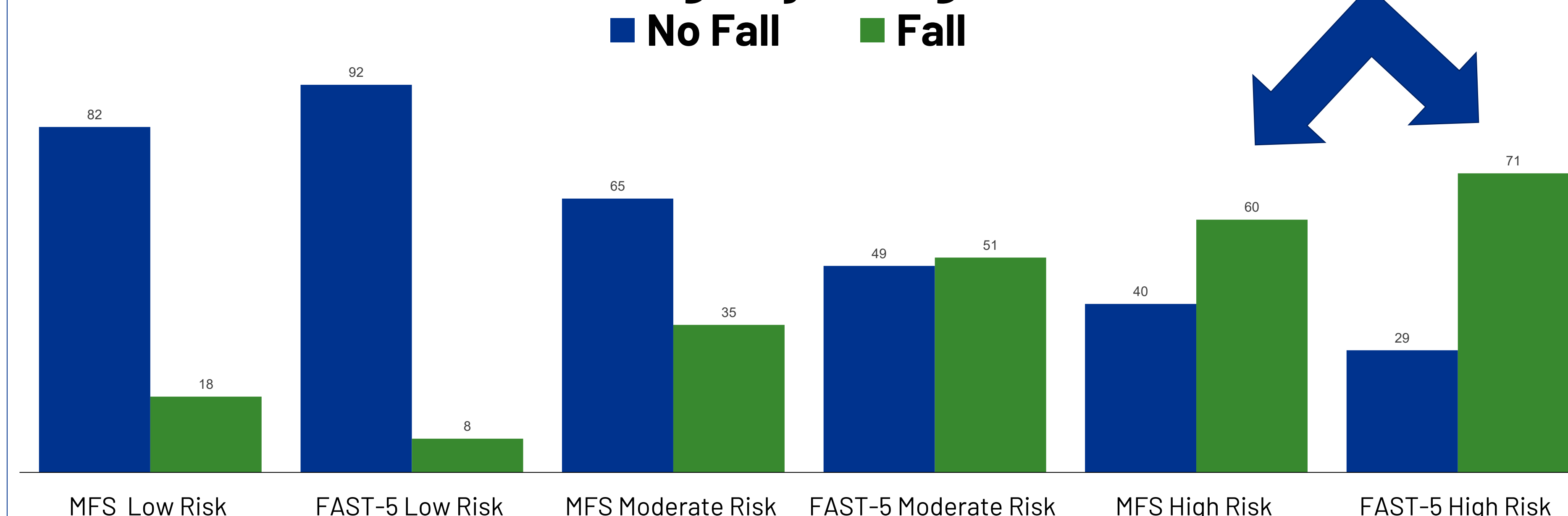
## Results

- FAST-5 Risk Tool displayed more accurate predictability of a fall in the high-risk category compared to MFS, 71% to 60%
- FAST-5 Risk Tool had lower error ratio in assigning a low risk fall score to a patient who experienced a fall compared to MFS, 6% to 18%
- The FAST-5 fall risk tool, with age and gender adjusted model, demonstrated 76% accuracy in predicting fall status compared to usual fall risk scale.

## Discussion

- FAST-5 demonstrated to be a valuable predictor of inpatient falls in our sample population
- The FAST-5 tool assesses clinically relevant patient factors, not assessed with MFS, and demonstrated improved fall risk prediction, allowing clinical staff to more effectively assign fall resources to patients identified as high risk
- Small sample size and single site are potential limiting factors

## Patient Fall Percentage by Assigned Risk Rank



## Implications for Practice

The FAST-5 tool shows promise as a clinically relevant patient assessment tool. However, additional studies are needed to validate the initial findings across care areas. In addition, could there be opportunity for fine tuning the tool by adjusting questions and or scoring to further differentiate the moderate risk category to better assess patient risk.

