Sensitivity and Specificity of the Edmonson Psychiatric Fall Risk Assessment Tool in an Adult Inpatient Psychiatric Unit

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Disclosure

- ✓ At the time the research was conducted, both Jordon Bosse, RN, MSN/ED and Constance LaPointe, RN-BC, PMHC were employed by St. Mary's Regional Medical Center in Lewiston, ME
- ✓ Neither author has any conflict or perceived conflict of interest related to this research
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Background

- Behavioral patients fall more often than medical patients (Allen et al., 2012)

- Different patient characteristics
  - Often younger (Tay et al., 2000)
  - Often alert (Yates & Tart, 2012)

- Unique risks
  - Med side effects (Tay et al., 2000)
  - Sleep disorders (Edmonson et al., 2011)
  - ECT (DeCarle & Kohn, 2000 & 2001)
  - Labile mental status (Allen et al., 2012)

- Repeat falls (Currie, 2008)

Purpose

- Sensitivity & Specificity
- Edmonson Psychiatric Fall Risk Assessment Tool (EPFRAT) vs. Johns Hopkins Fall Assessment Tool
- RN perception of usability

Phase I

Methods

- Retrospective review of 12 cases
- Completed JH and EPFRAT for each
- Two independent raters

Results

- 100% agreement on JH scores
- 83.3% agreement on EPFRAT scores

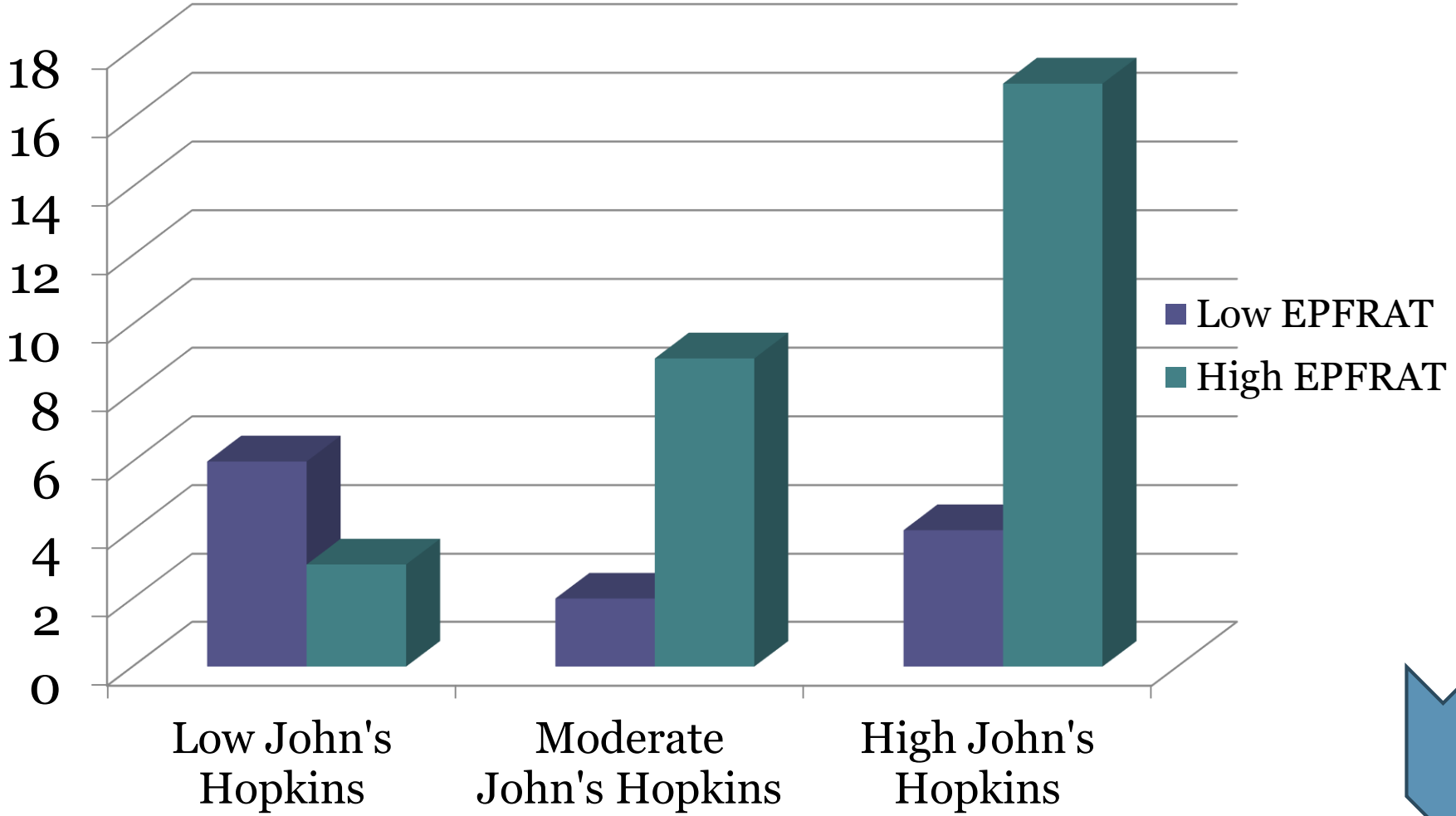
Phase II

Methods

- Retrospective review of all falls on adult behavioral unit (n=41)
- JH Score & EPFRAT score
- Matched cases

Results

Figure 1 Fall scores of patients who fell



Results

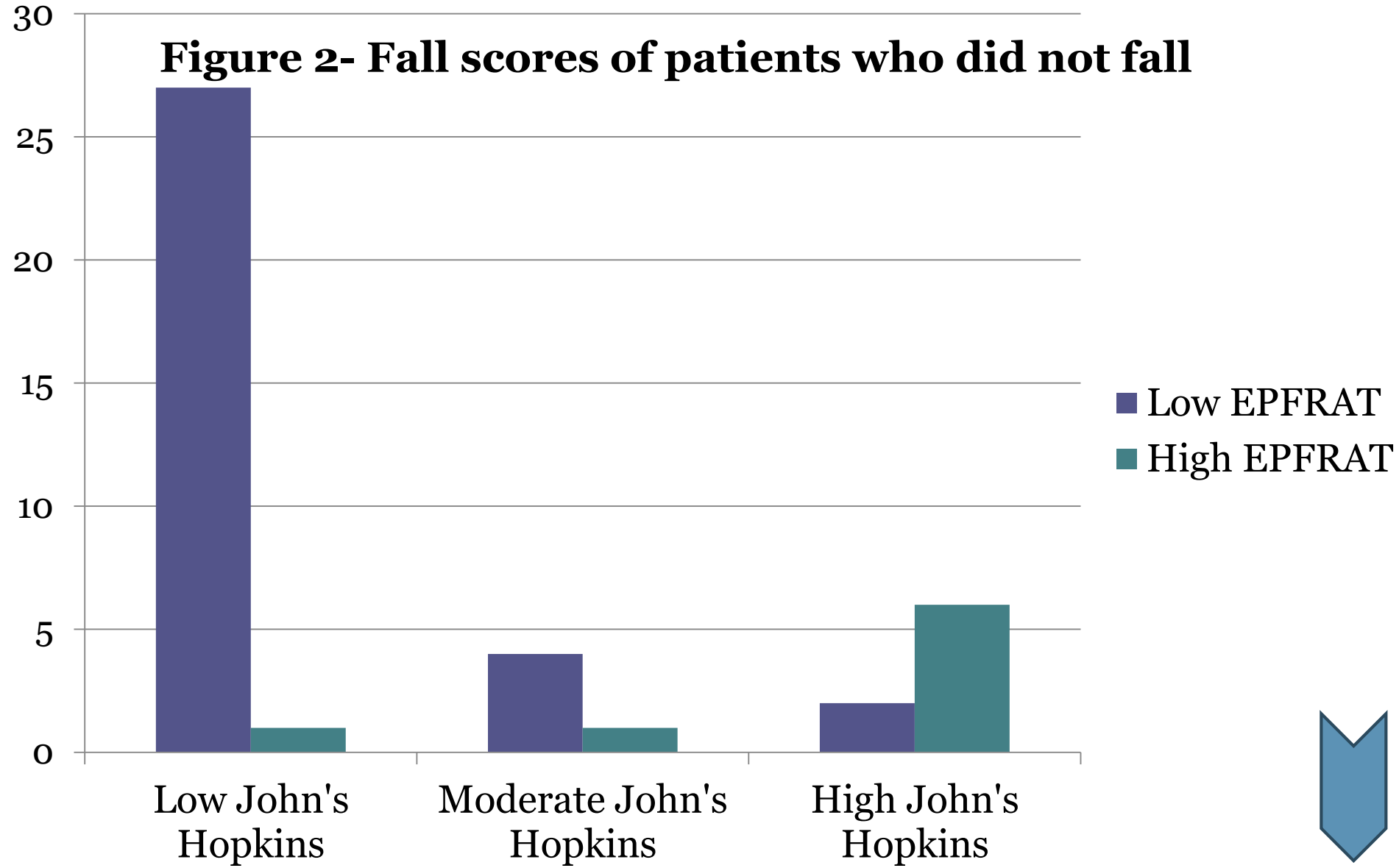


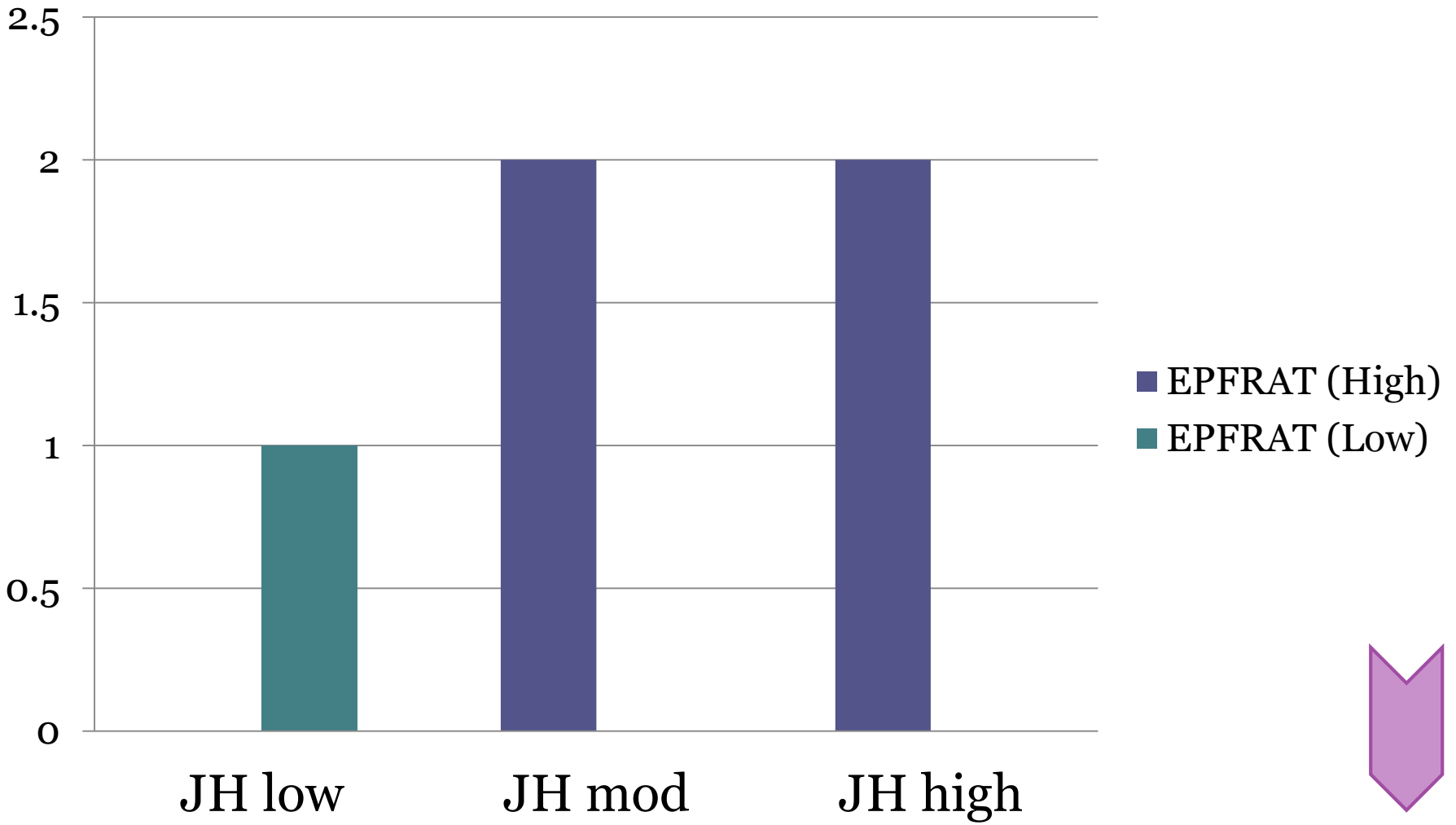
Figure 2- Fall scores of patients who did not fall
30
25
20
15
10
5
0
Low John's Hopkins
Moderate John's Hopkins
High John's Hopkins
Low EPFRAT
High EPFRAT

Methods: Phase III

- Piloted for 1 month
- 4 RNs who volunteered
- Filled out EPFRAT on paper
- 161 EPFRAT completed
- Compared to JH score in chart for same shift

Results

Figure 3- Comparison of Fall Risk Identification for people who fell during pilot by tool



Results

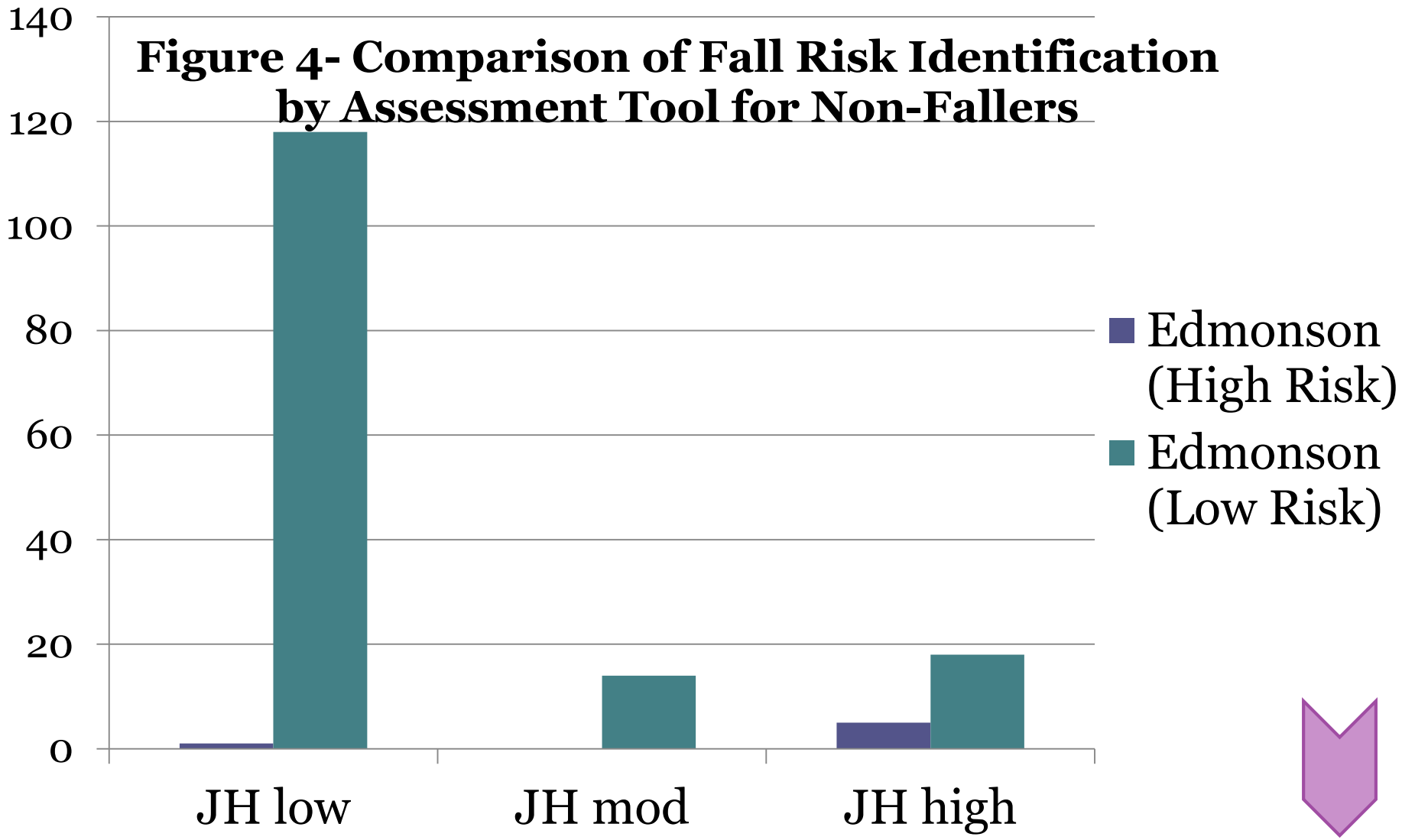


Figure 4- Comparison of Fall Risk Identification by Assessment Tool for Non-Fallers
140
120
100
80
60
40
20
0
JH low
JH mod
JH high
Edmonson (High Risk)
Edmonson (Low Risk)

Sensitivity & Specificity

	EPFRAT	Johns Hopkins
Sensitivity	0.80	0.40
Specificity	0.96	0.76

Conclusions & Implications

- Different needs and fall risks by patient population
- EPFRAT more specific for psychiatric patients
- EPFRAT was user-friendly
- Still need to use EB Intervention

Limitations & Challenges

- Small sample at one hospital

- Varied understanding of what constitutes a fall

- Discrepancy in reporting (incident vs. in chart)

Next Steps

- Mandatory training
- Larger scale, prospective evaluation of EPFRAT by adult behavioral health nurses
- Ask staff nurses to complete both EPFRAT and JH fall assessments on every patient

Thank you!

Questions?