“Evaluation of the Efficacy of Repeat Falls Risk Assessments Using the Morse Falls Scale”

Mary Beth Harrington

PhD, RN, ANP-BC, ACNS-BC, CCRN-K

Disclosures

- Veterans Administration (VA) Boston HealthCare System

- No conflict of interest
- No sponsorship or commercial support

Objectives

- Examine variability of Morse Fall Scores (MFS) in an adult acute care population
- Evaluate sources of discrepancies in MFS assessments
- Develop recommendations for the frequency of MSF assessments

Hospital Falls in USA

- 3.5 falls per 1,000 patient days
- 1 injurious fall per 1,000 patient days
- The most commonly reported adverse events

Hospital Falls

- Potentially preventable
- Nurse sensitive
- First step in prevention is risk assessment
- Mandated by JCAHO in 2015
- Medicare denies reimbursement for care related to inpatient falls since 2008.

Impact

- Delayed recovery
- Physical impairment
- Psychological impact of fear of falling
- Average cost of an injurious fall - $14,000

Morse Fall Scale (MFS)

- Most commonly used assessment
- Extensively studied
- Good sensitivity and negative predictive ability

Morse Fall Scale

- History of falling
- Secondary diagnosis
- Ambulatory Aids
- IV or saline lock
- Gait
- Mental status

Morse Fall Scale

- Most research is based on a single MFS score, usually at time of admission
- Most hospitals have policies requiring repeat measurements during the patient's stay

- What is the evidence for repeat measurements of the Morse Fall Scale in hospitalized patients?

Population

- 50 patients who sustained a fall between October 1, 2014 and September 31, 2015
- Retrospective review of electronic health records

Variables

- Patient age and gender
- Date(s) of fall
- Date(s) of transfer between nursing units
- All MSF variables and scores with time and date

- 890 MSF assessments on 50 patients
- Represents approximately 75 hours of nursing time

- Any change in score was validated against progress notes
- In the case of a discrepancy:
  - The progress notes were used as the standard
  - A corrected score was calculated

Discrepancies

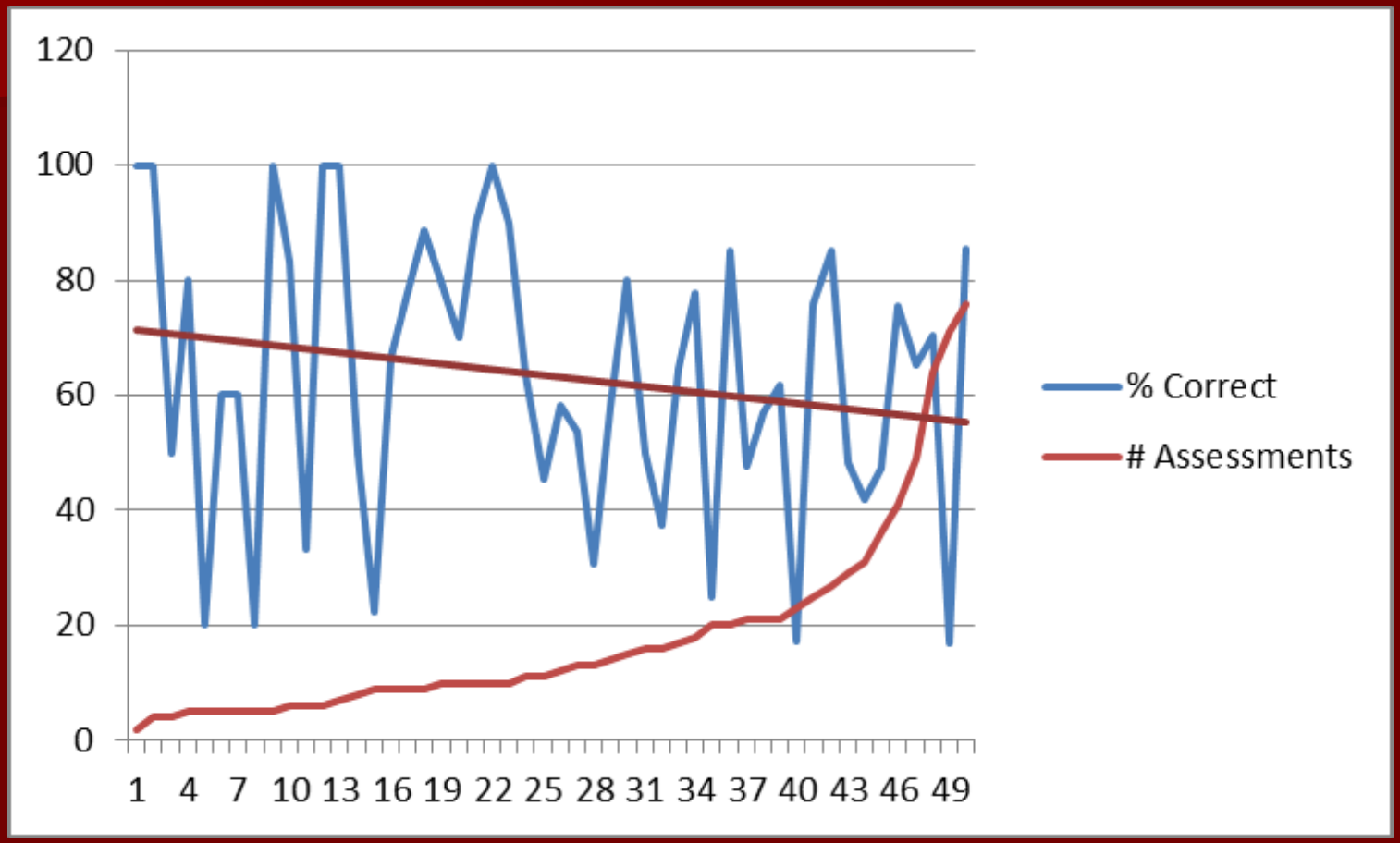
- Discrepancies in 41% of assessments
- 5.4 % of discrepancies due to calculation errors

H/O fall	0	0	0	0	0	25	25	25	0	0
2 Dx	15	15	15	15	15	15	15	15	15	15
Amb aids	15	15	0	0	15	0	15	0	15	15
IV	20	20	20	20	20	20	20	0	20	20
Gait	0	10	0	0	10	10	10	0	10	10
MS	0	0	0	0	0	15	15	0	15	0
Score	50	60	35	35	60	85	100	40	75	60
Corrected score	50	60	50	50	60	85	100	75	75	100

Causes of Discrepancies

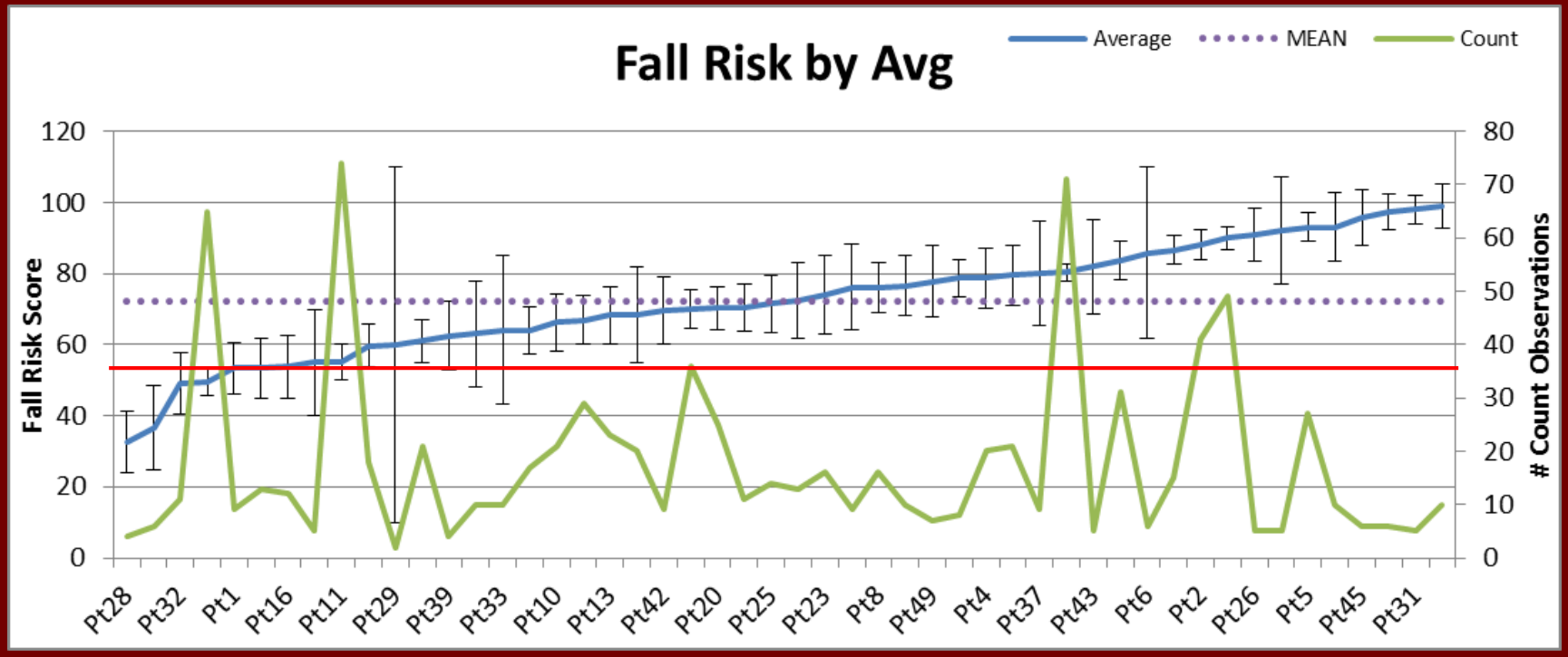
- Omitting history of falls
- Omitting comorbidities
- Omitting use of ambulatory aids
- Mental status changes (confusion)
- Variations in gait assessment

- Corrected scores were dichotomized into above or below 45
- Significant changes were defined as those which crossed the 45 point threshold


120
100
80
60
40
20
0
1 4 7 10 13 16 19 22 25 28 31 34 37 40 43 46 49
% Correct
# Assessments

Changes in Fall Risk Category

- 38 (76%) patients with no significant change from initial assessment


Fall Risk by Avg
Average
MEAN
Count
Fall Risk Score
Count Observations
120
100
80
60
40
20
0
80
70
60
50
40
30
20
10
0
Pt28
Pt32
Pt1
Pt16
Pt11
Pt29
Pt39
Pt33
Pt10
Pt13
Pt42
Pt20
Pt25
Pt23
Pt8
Pt49
Pt4
Pt37
Pt43
Pt6
Pt2
Pt26
Pt5
Pt45
Pt31

Score Change to High Risk (>45)

- N = 5 (10%)
- All due to a fall

Score Change to Below 45

- 4 scores (8%) due to changes in gait assessment
- 1 (2%) score due to change in mental status
- 2 (4%) scores due to discontinuing IVs
- Changes were brief and quickly returned to High Risk status

H/O fall	0	0	0	0	0	0	0	0	0	0	0	0
2 Dx	15	15	15	15	15	15	0	15	15	15	15	15
Amb aids	0	0	0	0	0	0	0	0	0	0	0	0
IV	20	20	20	20	20	20	20	20	20	20	20	20
Gait	10	20	20	20	20	0	0	0	0	0	0	0
MS	15	0	0	0	0	0	0	0	0	0	0	0
Score	50	60	60	60	60	35	20	35	35	60	35	35
Corrected	60	60	60	60	60	35	35	35	35	85	60	60

Conclusions

- Little change in the MSF score of adult patients during their hospitalization
- MSF assessment during the night shift is particularly problematic
- Gait assessment is most variable
  - Actual change in patient gait?
  - Educational need?
  - Definition of bedrest?

Recommendations for Assessment

- Admission
- Once a patient is identified as high risk, should remain so
- For patients identified as low risk, assess;
  - On transfer
  - After a fall
  - With any change in mental status

Thank You.