

Using the *Morse Fall Scale*®

Morse Fall Scale® (MFS) is a rapid and simple method of triaging a patient’s risk of falling from a *physiological anticipated fall* (i.e., 86% of all falls) but does not predict an accidental fall or an unanticipated physiological fall. As fall risk may change rapidly, patients should be scored twice daily, or following a change in condition. The MFS consists of the rating of six items: (1) history of falling, (2) secondary diagnosis, (3) ambulatory aids, (4) intravenous therapy, (5) type of gait and (5) mental status (See Box below). Validity is dependent on accurate scoring, and staff Inservice training in the use of the Scale should be offered regularly.’

MORSE FALL SCALE			
ITEM		SCORE	
1. History of Falling	no	0	—
	yes	25	
2. Secondary Diagnosis	no	0	—
	yes	15	
3. Ambulatory Aid	none/bed rest/nurse assist	0	—
	crutches/cane/walker	15	
	furniture	30	
4. Intravenous Therapy/Saline Lock	no	0	—
	yes	20	
5. Gait	normal/bed rest/wheelchair	0	—
	weak	10	
	impaired	20	
6. Mental Status	oriented to own ability	0	—
	overestimates/forgets limitations	15	
		Total	—

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Instructions for using the MFS

All of the information you need for implementing a fall prevention program is contined the book, *Preventing Patient Falls. (2nd ed)* (2009, Springer Publications). This brief outline does not replace that manual. Other resources are:

Morse, J. M. (2001) Preventing patient falls in the elderly. *Reflections on Nursing Leadership*.

Morse, J.M. (2006). The safety of safety research: The case of patient falls. *Canadian Journal of Nursing Research*, 38(2), 72-86.

Morse, J.M. (2018). *Preventing patient falls institution-wide: The role of the administrator*. Henry Stewart Talks: London, UK.

Scoring

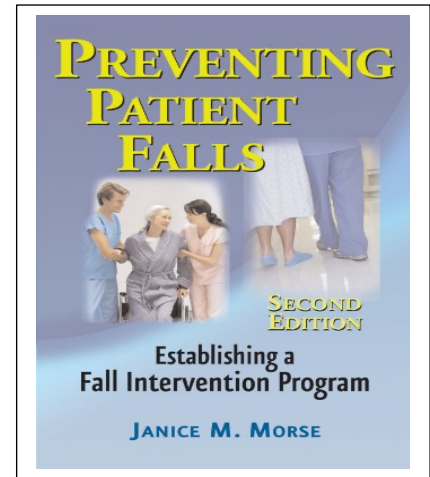
The patient score for each item is added to give a total score.

What Do the Scores Mean?

The MFS is a ratio level scale, like a thermometer. As the MFS score increase, so does the degree of risk of a fall. However, Nurses insisted on knowing when the scores were low, moderate or high, and we determined these levels by scoring all patients in various care areas to see the pattern of fall scores and determining when the falls started to occur. In high risk areas (for instance a long term care unit or stroke patients, all patients may score above the cut off, so there is little point in using these cut off scores. It is therefore recommended that the patient's actual score be used and recorded; that the goal of care be determined by the patient's fall risks behaviors, (and intervention strategies individualized accordingly) and the goal of care to reduce the patient's score, thereby reducing fall risk.

Determining the Level of Risk:

The cutoff scores in acute care that revealed increasing risk were less than 25 for low risk; 25-44 for moderate risk, and 45 and above for high risk. For long term areas the high risk cutoff score is often 55 and above. Unfortunately, only attending to the risk levels changes the scale to a nominal-level scale and the determination of high risk scores from 45 to 125 is lost. What does a patient with a score of 85 look like? How do the interventions for that patient differ from a patient with a



score of 60? Nurses tell me that the only high risk interventions are “turning on the bed alarm” and this is *nonsense*.

Nurses must use the actual score and chart and attend to that number, when planning interventions.

How Often Should Patients be Scored?

Presently nurses are scoring patients twice daily and when a fall or change of conditions occurs. However, nurses also know that fall risk is unstable—get a patient up to sit in the chair, and the patients’ gait may be weak, But when the patient is tired and is returned to bed, his/her gait may be impaired and his fall score increased.

As nurses become familiar with the Scale, they use the items as a part of their assessment and chart accordingly. In long term areas (such as nursing homes) where the nurses know their patients, stable patients may be scored even weekly.

Types of Patient Falls

Falls may be classified as:

- *Anticipated Physiological fall* (78% of all hospital falls) caused by imbalance, weakness, poor gait, and limited ability to rise from a chair. Risk of falling assessed using the MFS.
- *Unanticipated physiological fall* (8% of all hospital falls). These patients may have a normal gait and have a low fall score. Until they have their first unexpected fall, they may not be realized to be a fall risk.
- *Accidental fall* (14% of hospital falls) The patient may trip, or slip, and the fall is usually caused by some mishap with the environment.

Monitoring Patient Fall Risk

As noted above, the patient fall score must be charted, so that any decrease (reduction in fall risk) or increase in fall score is brought to the attention of staff. Most acute care units score patient fall risk every morning and evening, plus following any change in the persons condition, or after a fall. However, recall that the MFS only identifies Anticipated physiological falls. If a patient is prone to Unanticipated Physiological Falls (is perhaps seizure prone, or a stroke patient), or if there is a place in the hallway that Accidental Falls have previously occurred, these patients or areas require special monitoring, fall prevention strategies or even environmental modification (such as installing hand rails to prevent Accidental Falls).

Interpreting a High Risk Score

Most acute care units set 3 levels of risk: Low, (less than 25) (medium 25 to 45) and high (45 and above). These provide only broad categories of fall interventions (see below). Fall interventions must therefore be individualized to each patient, in particular for patients in the high risk zone, (i.e., 45-125), with increased attention when the scores are higher. These patients must be carefully monitored with assistance out of bed and in the bathroom.

If a Fall Occurs

When a “free fall” occurs (ie., when the patient falls without breaking the fall with hands, such as falling backwards and hitting his head) the *thump* is usually heard. Also, the *bang* that occurs when the patient falls and knocks furniture over at the same time. Other falls may not be heard and the patient found on the floor, or even, simply reports after the fact that they fell.

Is the Patient: Injured? Speak to the patient, to assess their level of consciousness, “Are you OK?” “Do you hurt anywhere?” “Do you remember how it happened?” Examine the patient for injury—especially fractures—before attempting to help the patient up.

If the patient appears unhurt, wait for assistance—ask a second nurse to help lift the patient. If necessary use a wheelchair to transfer the patient to the bed. If the patient is injured, report and seek medical assistance. Chart the time, circumstances of the fall, type of fall, and all bruises and complaints of pain.

Determine the Type of Fall Nurses tend to “overchart” that the fall was accidental. This label tends to be overused because “accidental” implies that the fall could not have been prevented; that neither the nurse nor the *institution* was at fault.

Obtain as much *information* at the fall itself **from** both the patient and anyone who observed that fall. Note the position of the patient—did the patient “land” on his/her front or back; did any furniture “break” the fall or did the patient hit his/her head (or any other part of the body) as he or she fell? Why did the patient fall: loss of balance, a slip or trip? Or does the patient have no memory of the fall itself?

Reassure the patient and do not rush to get the patient off the floor. Look for fractures, bruises or other injuries. Head or neck involvement? Back injury? Where does the patient complain of pain?

Do not attempt to lift the patient off the floor yourself. Call for help.

Chart and communicate: Once the patient is back in bed, chart the incident, and complete the administrative fall report form. Call for a physician if there is any injury. Report the incident to the family. Finally, as a ‘repeat fall’, with the patient doing the same activity at the same time of day is statistically likely, ensure the staff

know of the incident and that a repeat incident is likely to be repeated in the next 24 hours., so they can assist in fall prevention.

Frequently Asked Questions

How does the Scale “work”? The Scale was validated statistically, but asking the computer to identify characteristics of fall patients from controls. This identified 78% of those who fell, and were classified as *Anticipated physiological fallers*. Examination of the charts of the “errors” enabled the identification of true *Accidental Falls* and *Unanticipated Physiological Falls*.

What about Medications? Medications are a part of the Scale in the Secondary Diagnosis item. In developing the indices (items) we first included medications that were thought to contribute to falls, then numbers of medications, then, when there was no difference in the scales accuracy, combined this item with co-morbidity (Secondary Diagnosis). Of course, medications also contribute to falls as they relate to the other variables (mainly gait and mental status). I recommend that, if a patient scores as high risk for falling, then a patient assessment is conducted, and this includes a review of medications, with the goal of reducing the medications or side effects, to reducing the patient’s fall score. (See Morse, Preventing patient falls, Springer Publications).

Scoring ‘IV’ when a Patient is on IV Intermittently. There is always a tension between the accuracy of scoring and clinical feasibility of use. Of course, the score of 15 points for IV should only be given when the IV is connected. *However*, the nurses pointed out that they only scored twice a day, and therefore they preferred to give the patient with intermittent IV with a heparin lock the additional 15 points when scoring, rather than being asked to add 15 points when an IV infusion was being given.

What is NOT a Fall Recorded on the Patient Fall List When reporting patient falls, always note the type of fall. Only *patient* falls are included on the list report—record staff or visitor falls on a separate list. Ensure the falls are recorded. Patients who attempt to commit suicide from high balconies are not patient falls. One institution had recorded an incident in which a patient in was wheelchair and had been knocked over by a car reversing, and “fell” to the ground. This is a traffic accident, not a patient fall.

Note: Details of scale construction, the reliability and validity of the Morse Fall sSale is located in the appendix of Morse, JM (2009). *Preventing Patient Falls. (2nd ed), Springer Pub).*
