

Application of the Lumbar Motion Monitor Model in Patient Handling

Types of Patient Moves

- Wheelchair-to-Bed in Low Position
- Wheelchair-to-Bed in Higher Position
- Wheelchair-to-Bed in Low Position & Belt
- Cardiac Chair to Bed in Low Position
- Patient Lift Assist to Bed in Low Position

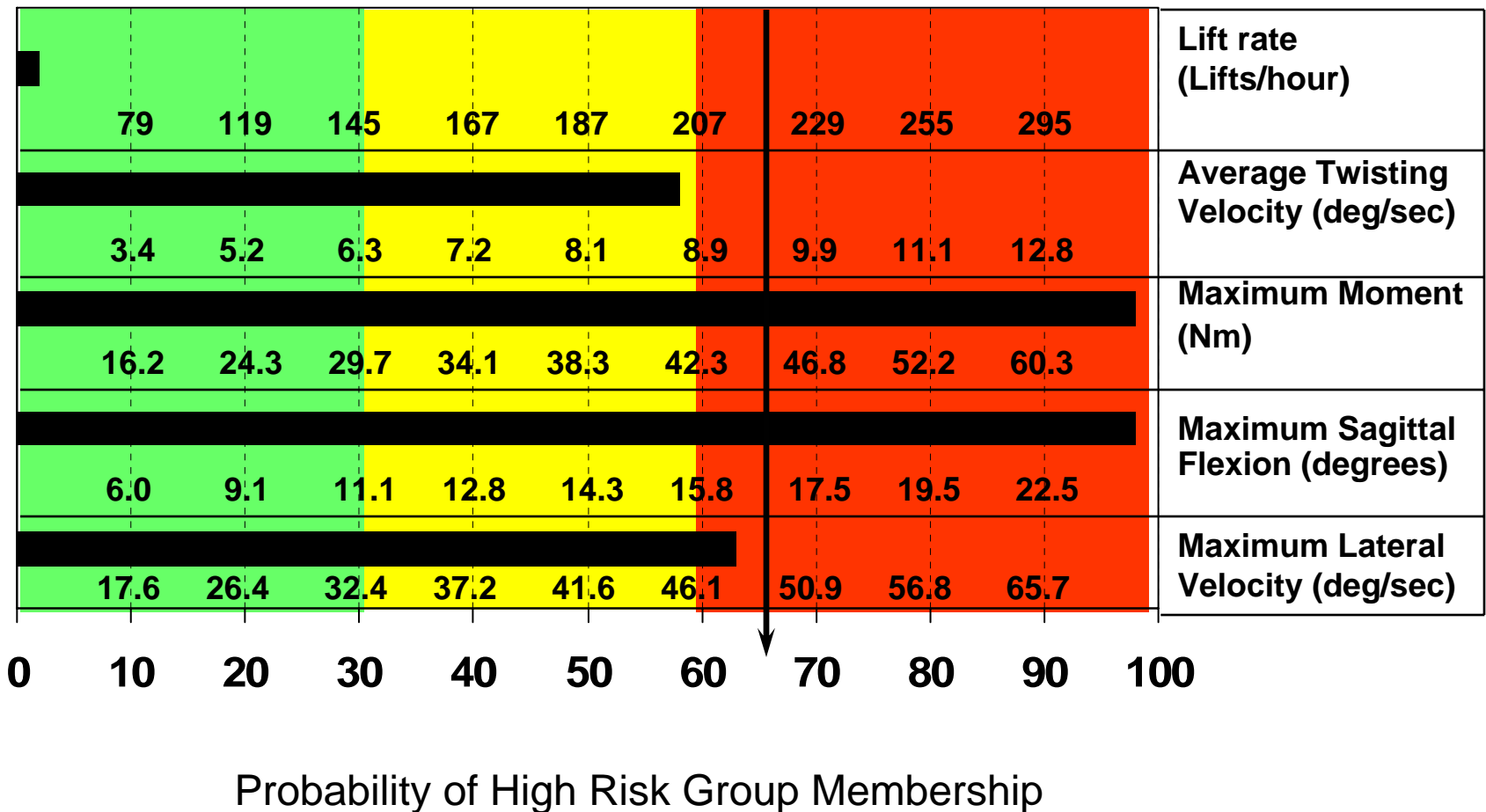
Components of Patient Moves

- Three Components of Chair to Bed Moves
 - Stand Patient up from Chair
 - Lower Patient to Bed
 - Swing Legs onto Bed
- Two Components of Patient Lift Assist
 - Pump lever to raise patient
 - Push Patient Lift to bed

Overall Patient Handling Risk

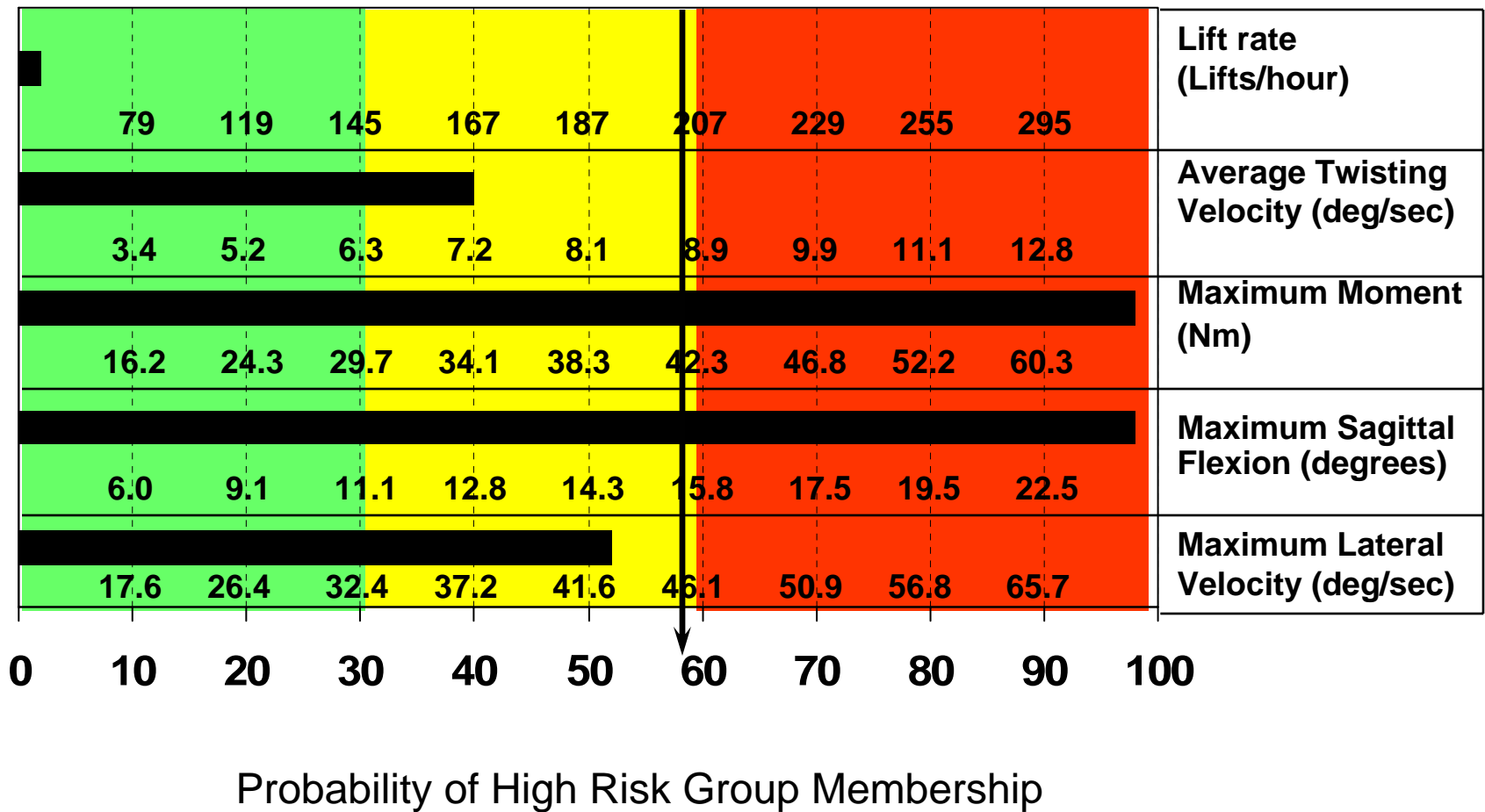
(4 workers, 2 patients)

Average Probability of Low Back Disorder Risk : 64%



Overall Task Risk: Wheelchair-to-Bed in Low Position

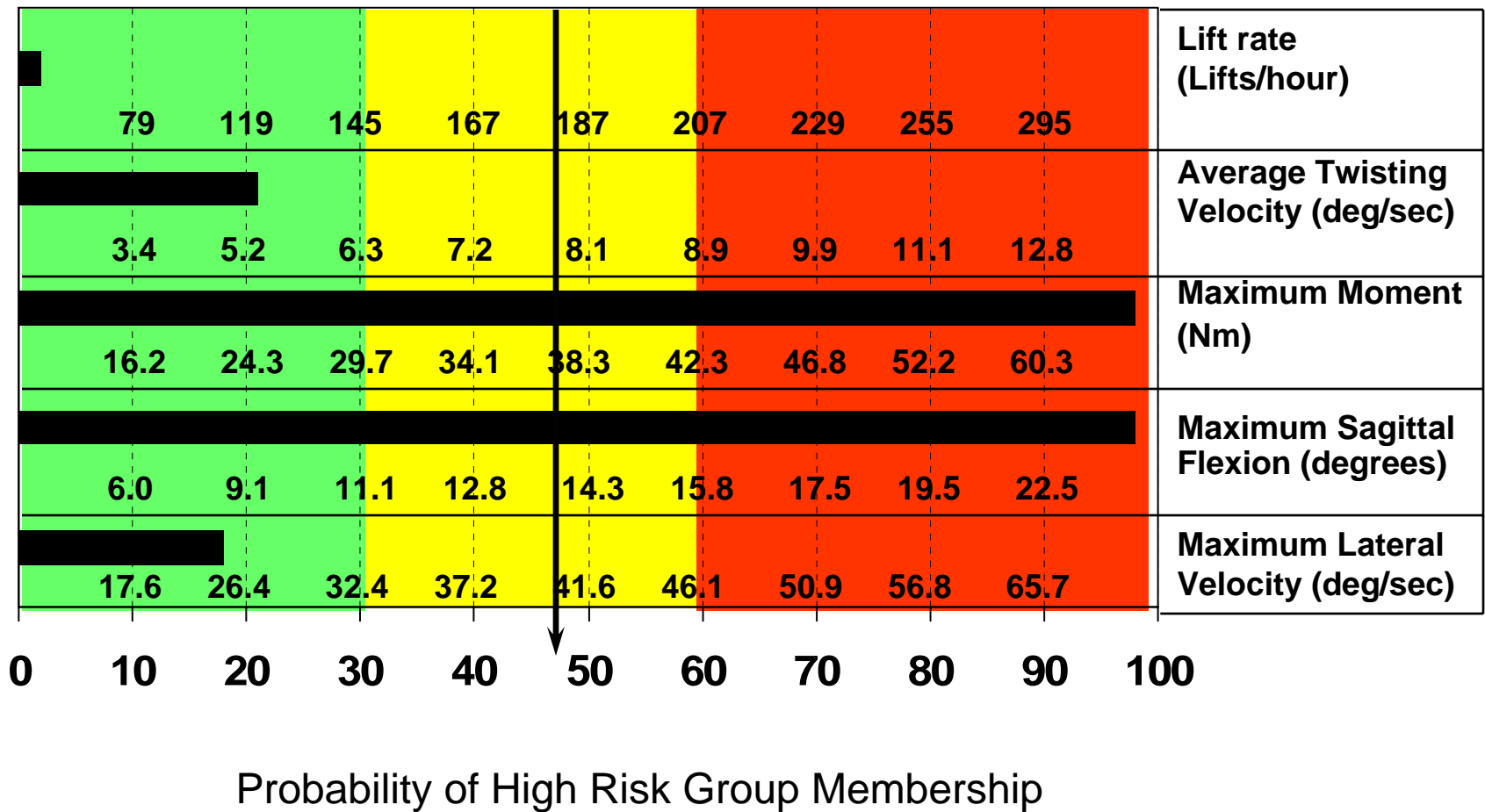
Average Probability of Low Back Disorder Risk : 58%



Task Risk: Wheelchair-to-Bed in Low Position

Subtask: Stand Patient Up from Wheelchair

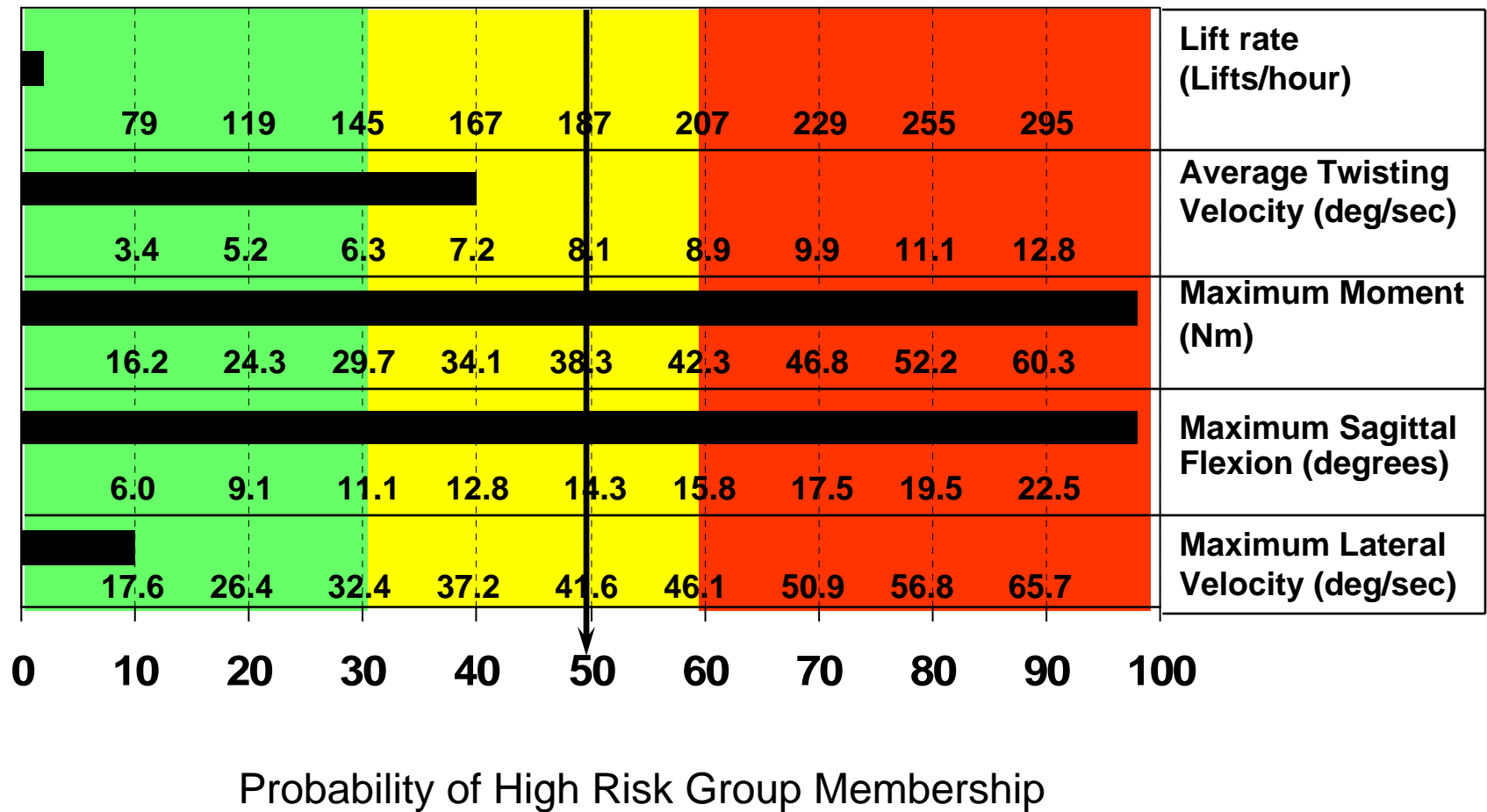
Average Probability of Low Back Disorder Risk : 47%



Task Risk: Wheelchair-to-Bed in Low Position

Subtask: Lower Patient to Bed

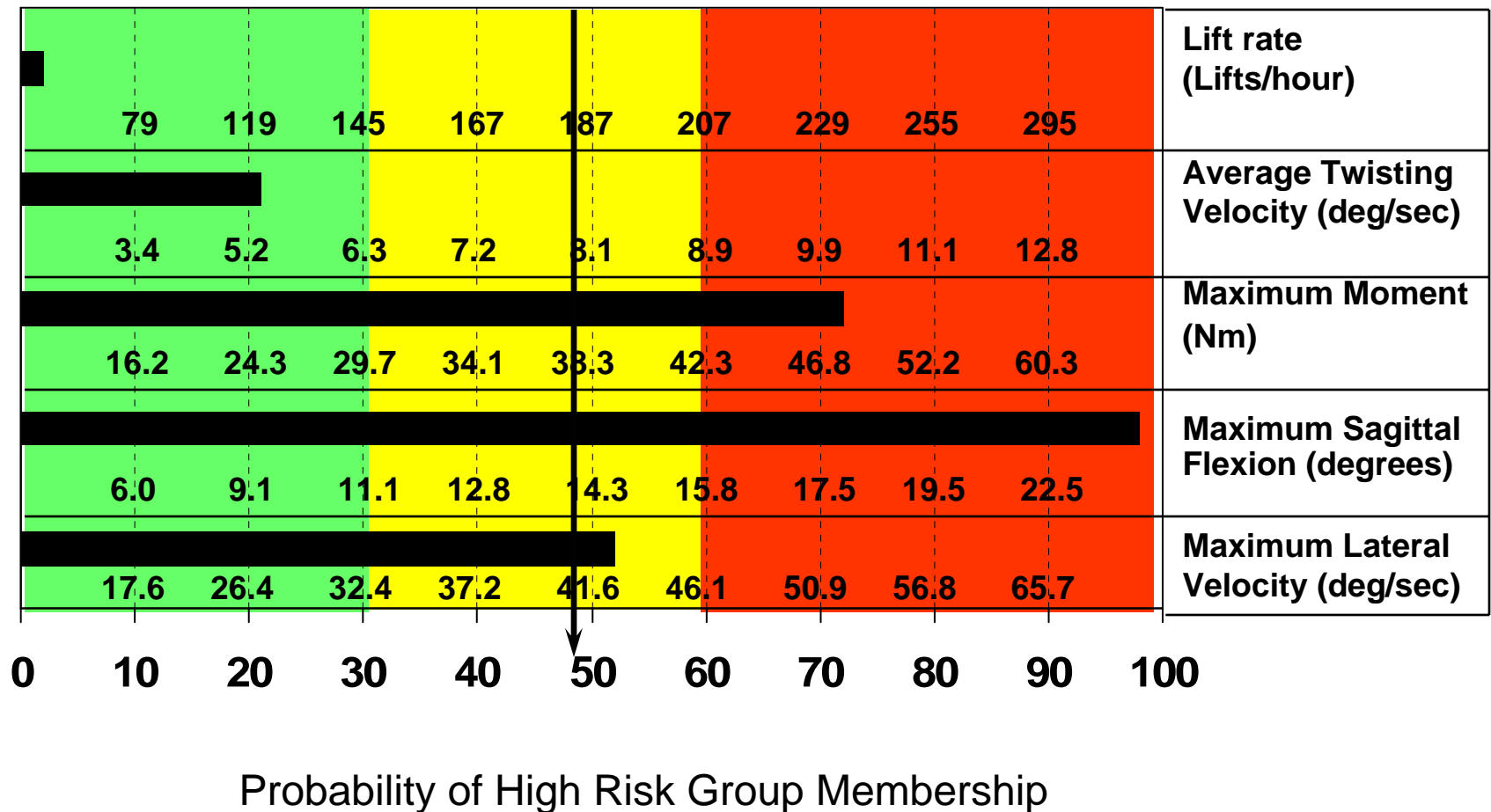
Average Probability of Low Back Disorder Risk : 49.6%



Task Risk: Wheelchair-to-Bed in Low Position

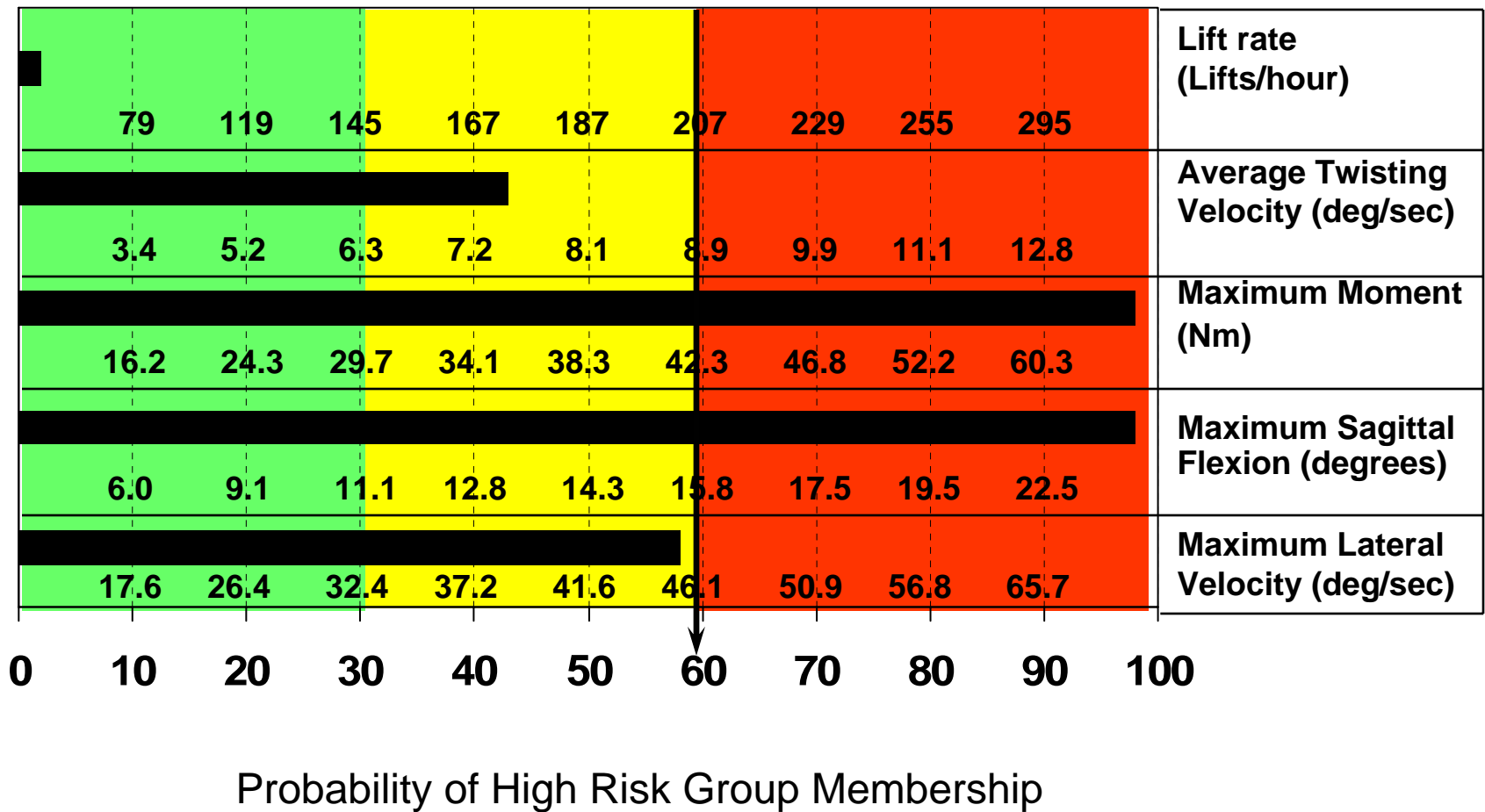
Subtask : Swing Legs onto Bed

Average Probability of Low Back Disorder Risk : 49%



Overall Task Risk: Wheelchair-to-Bed in Higher Position

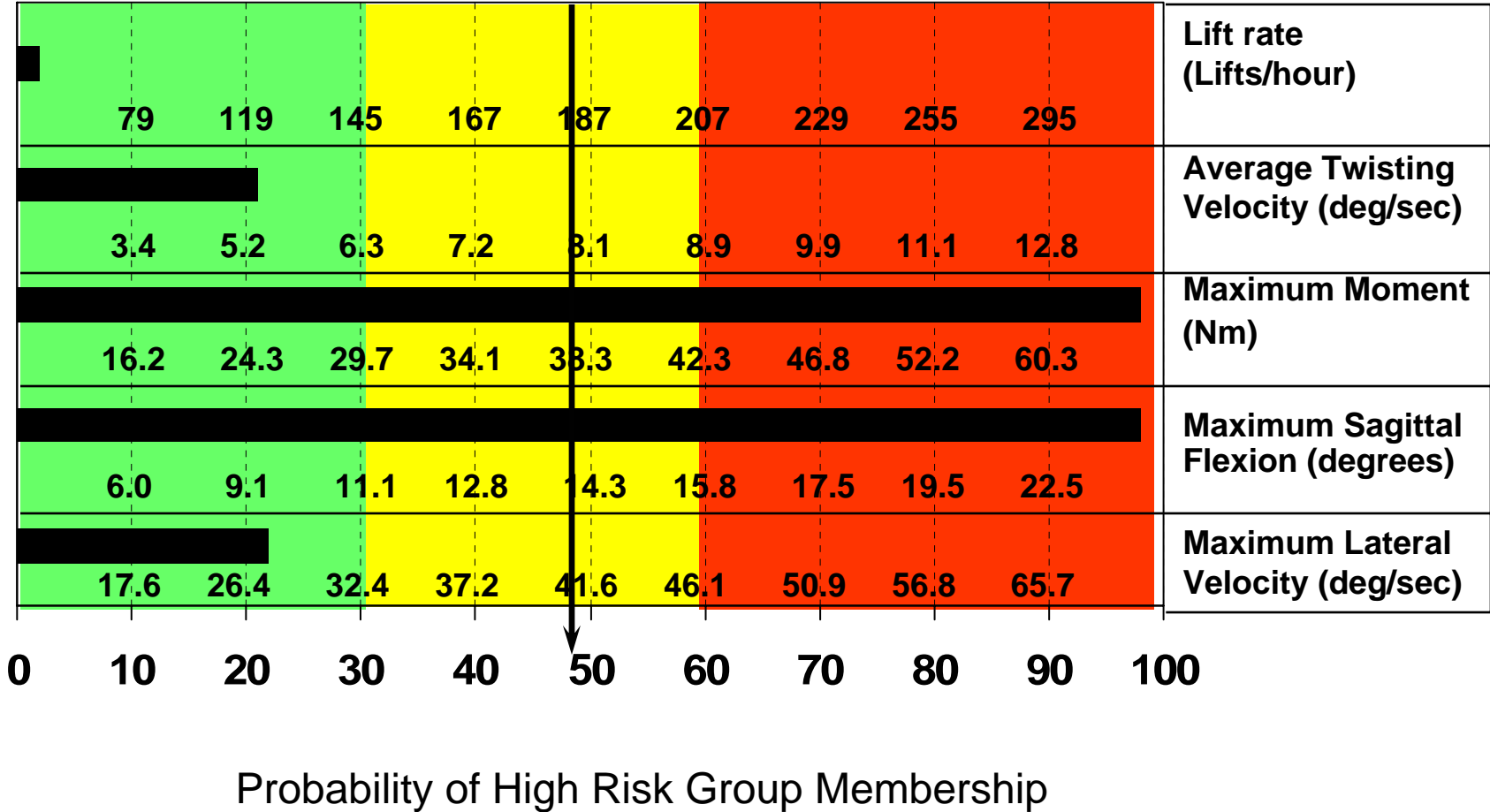
Average Probability of Low Back Disorder Risk : 59.6%



Task Risk: Wheelchair-to-Bed in Higher Position

Subtask : Stand Patient Up from Wheelchair

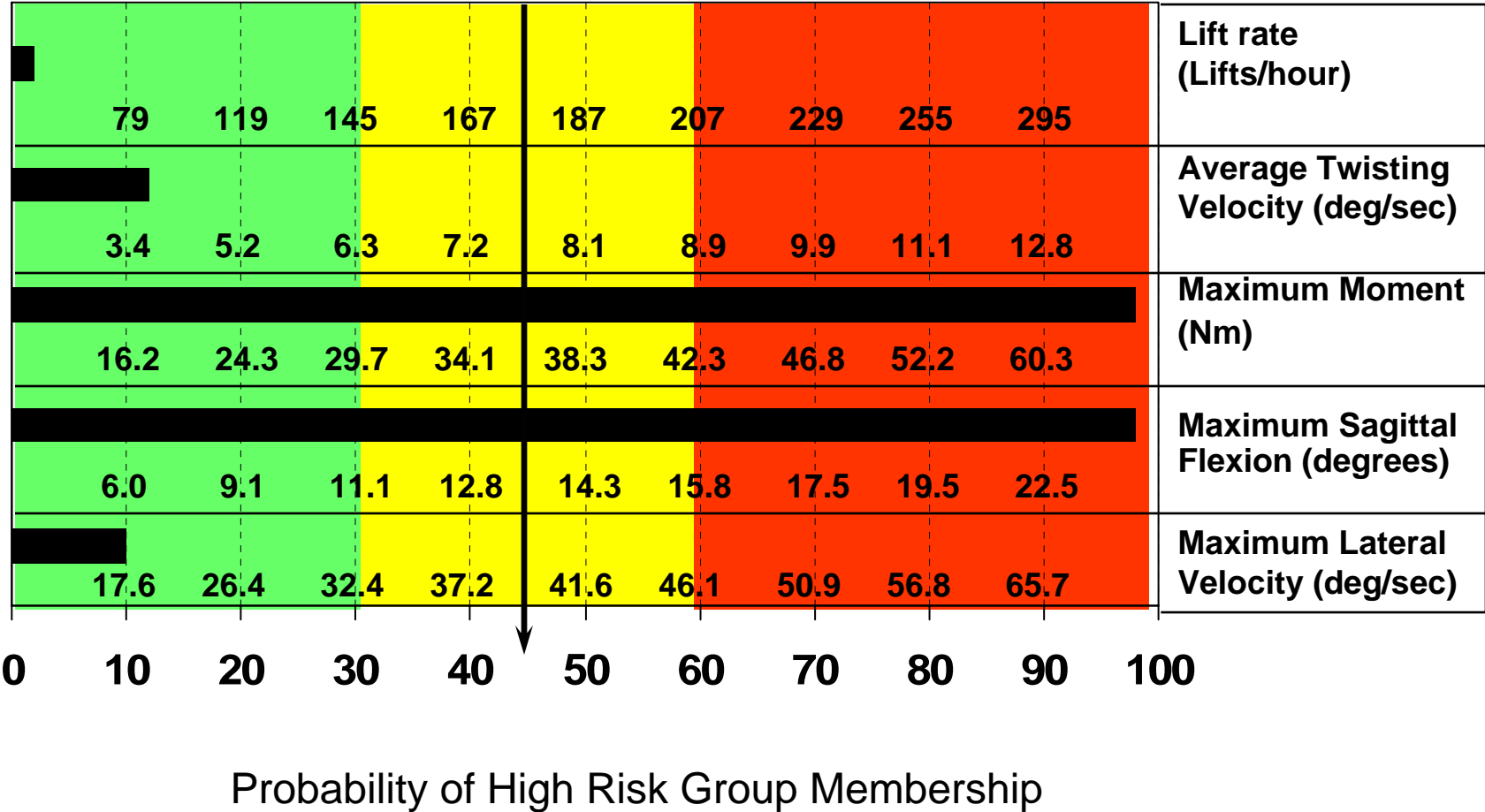
Average Probability of Low Back Disorder Risk : 48%



Task Risk: Wheelchair-to-Bed in Higher Position

Subtask: Lower Patient to Bed

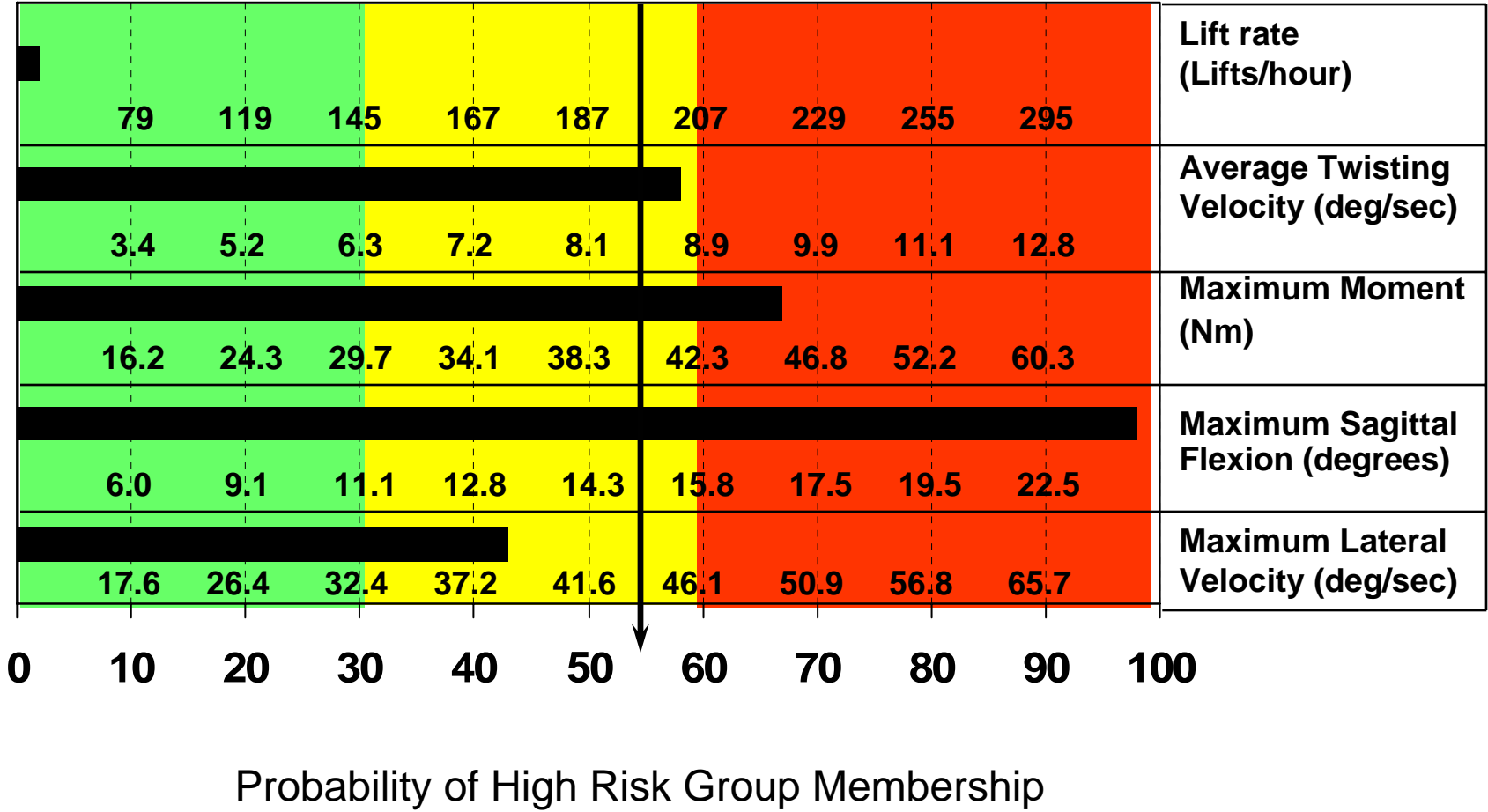
Average Probability of Low Back Disorder Risk : 44%



Task Risk: Wheelchair-to-Bed in Higher Position

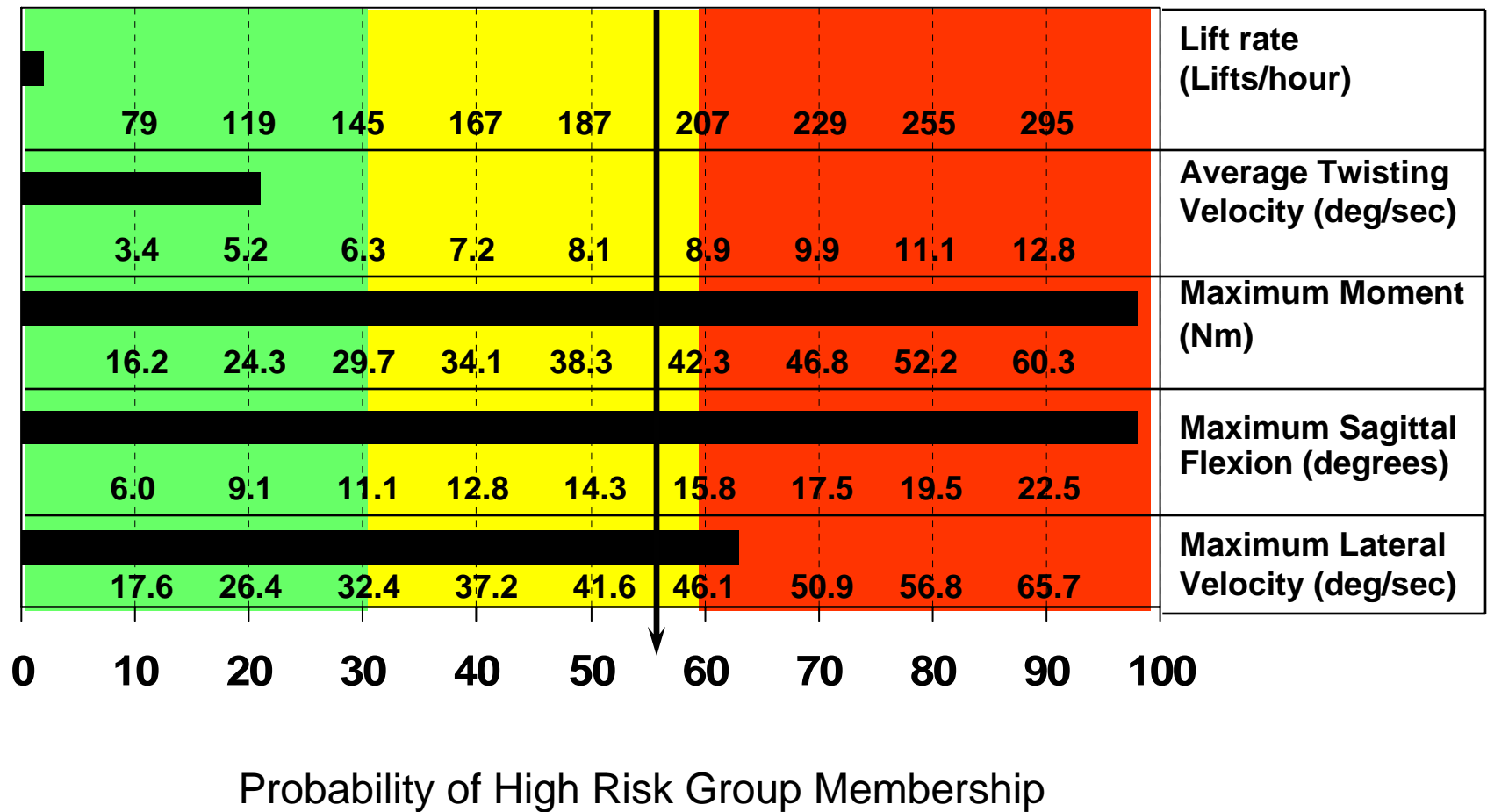
Subtask: Swing Legs into Bed

Average Probability of Low Back Disorder Risk : 54%



Overall Task Risk: Wheelchair-to-Bed in Low Position & Belt

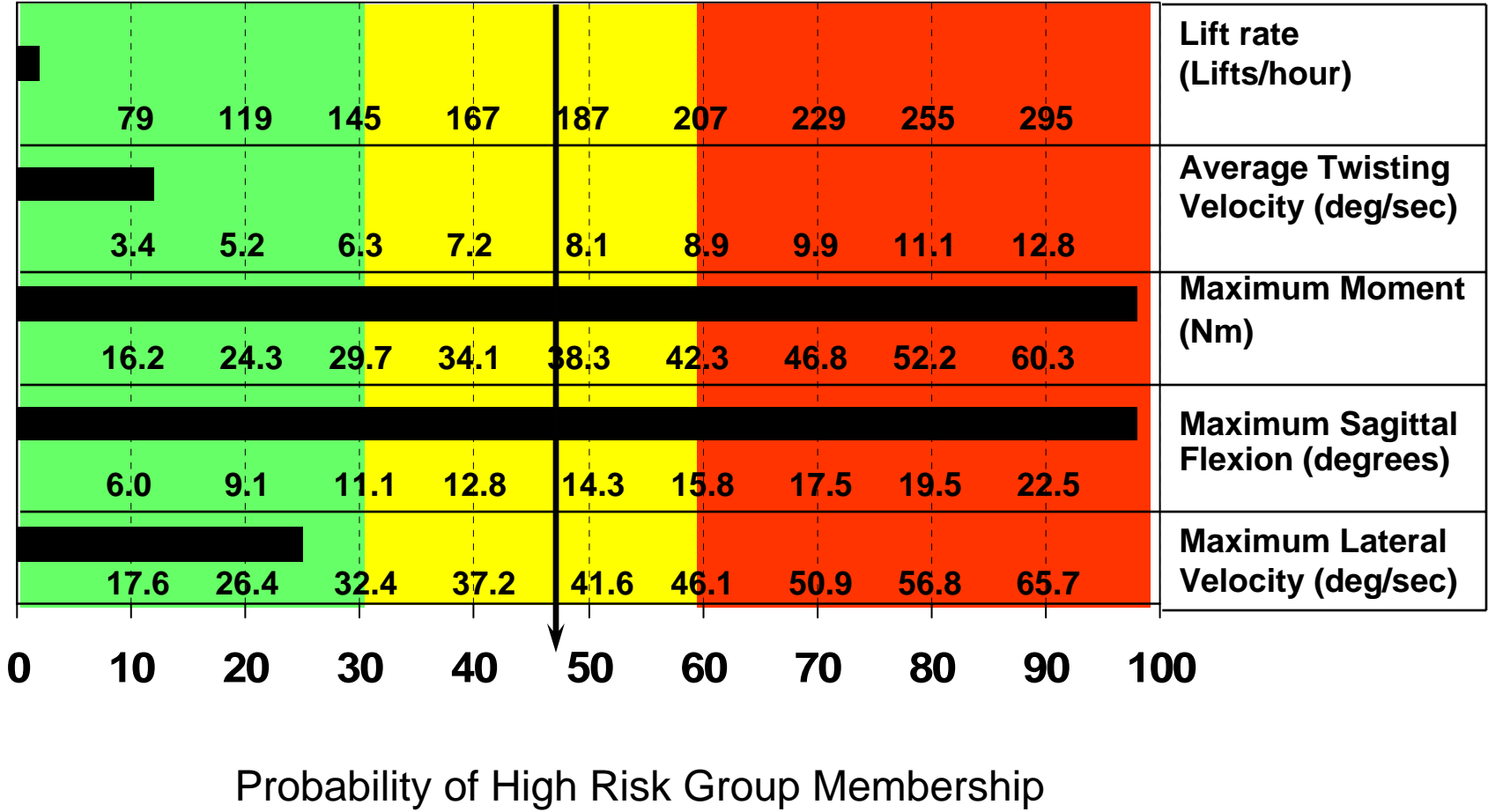
Average Probability of Low Back Disorder Risk : 56%



Task Risk: Wheelchair-to-Bed in Low Position & Belt

Subtask: Stand Patient Up from Wheelchair

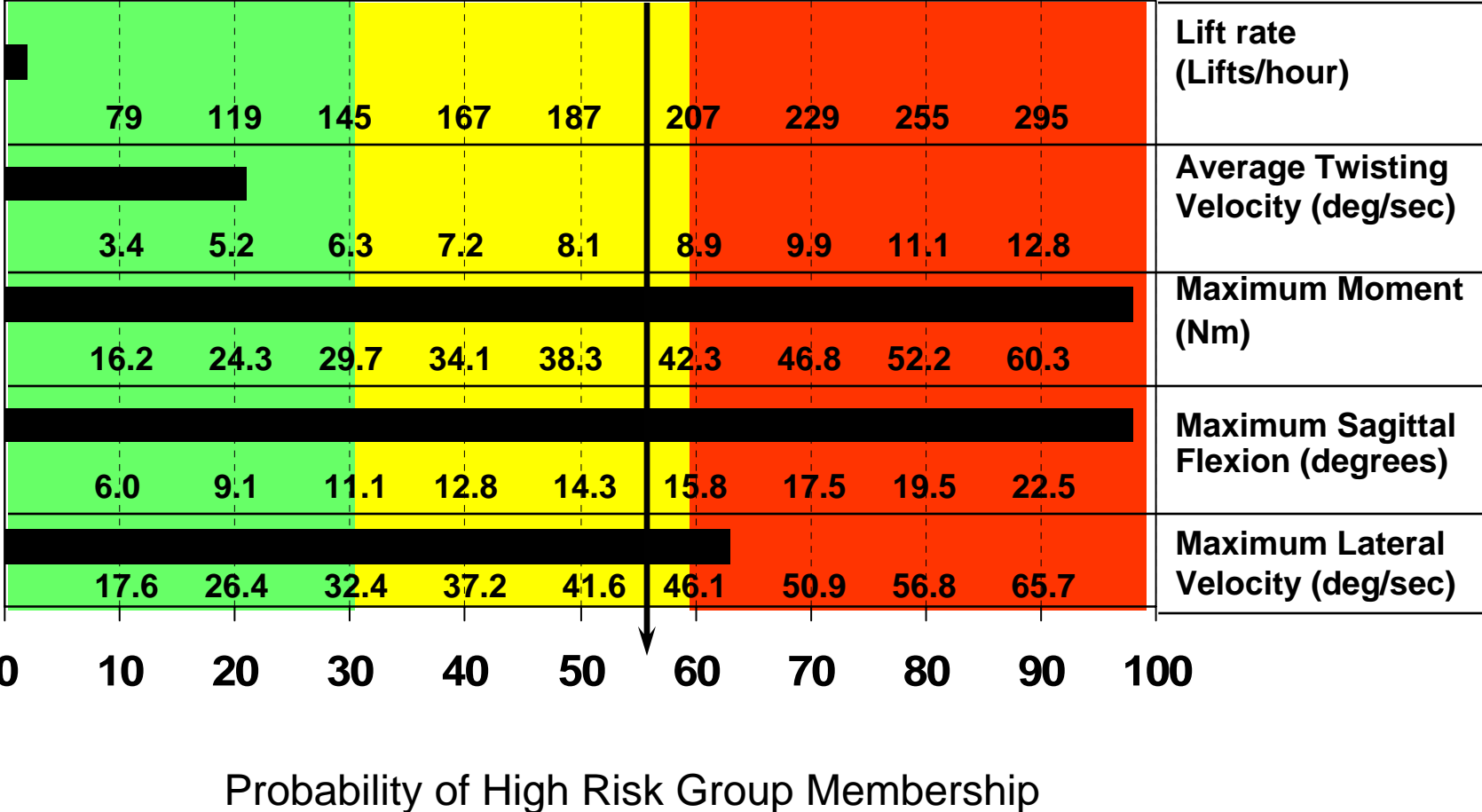
Average Probability of Low Back Disorder Risk : 47%



Task Risk: Wheelchair-to-Bed in Low Position & Belt

Subtask: Lower Patient into Bed

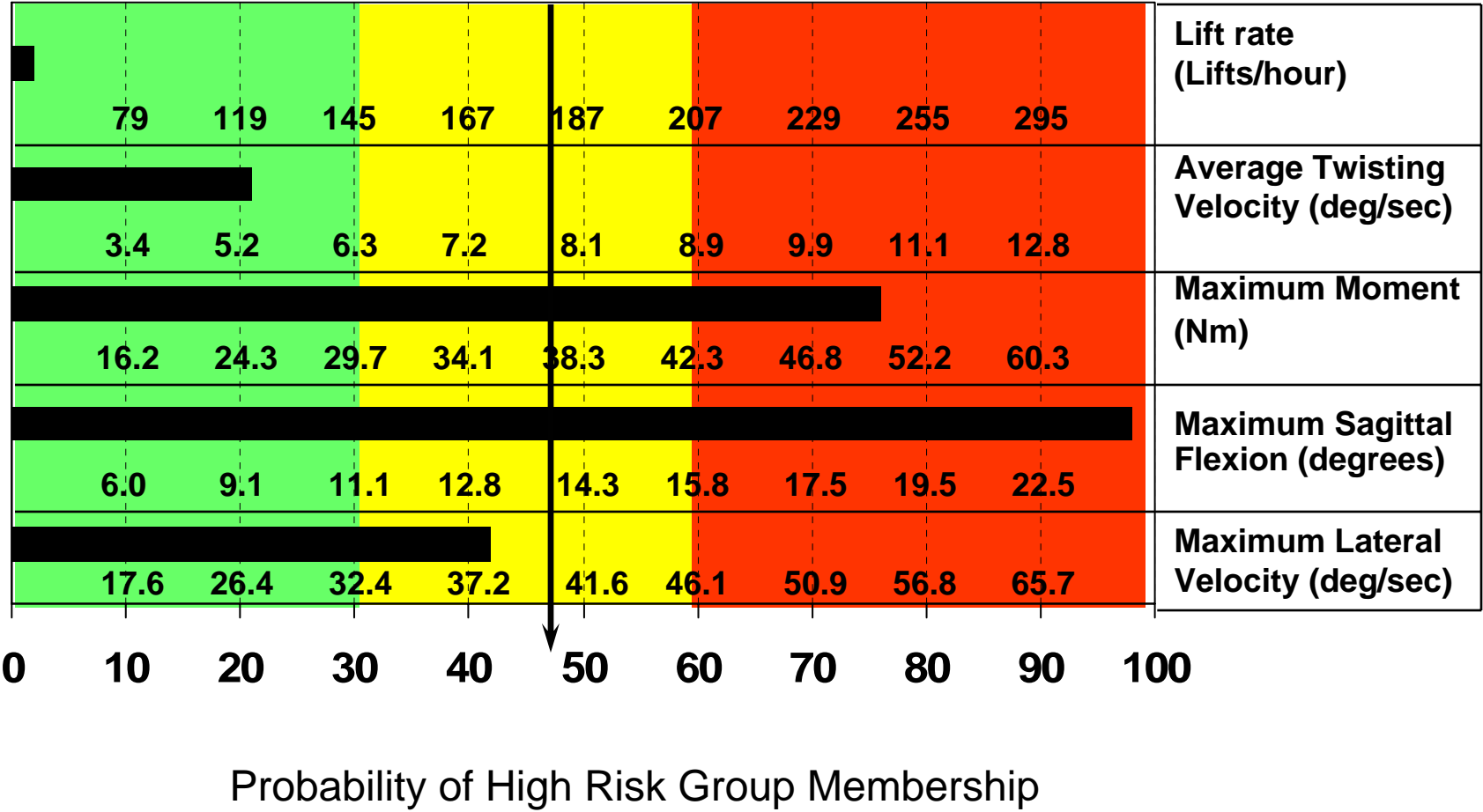
Average Probability of Low Back Disorder Risk : 56%



Task Risk: Wheelchair-to-Bed in Low Position & Belt

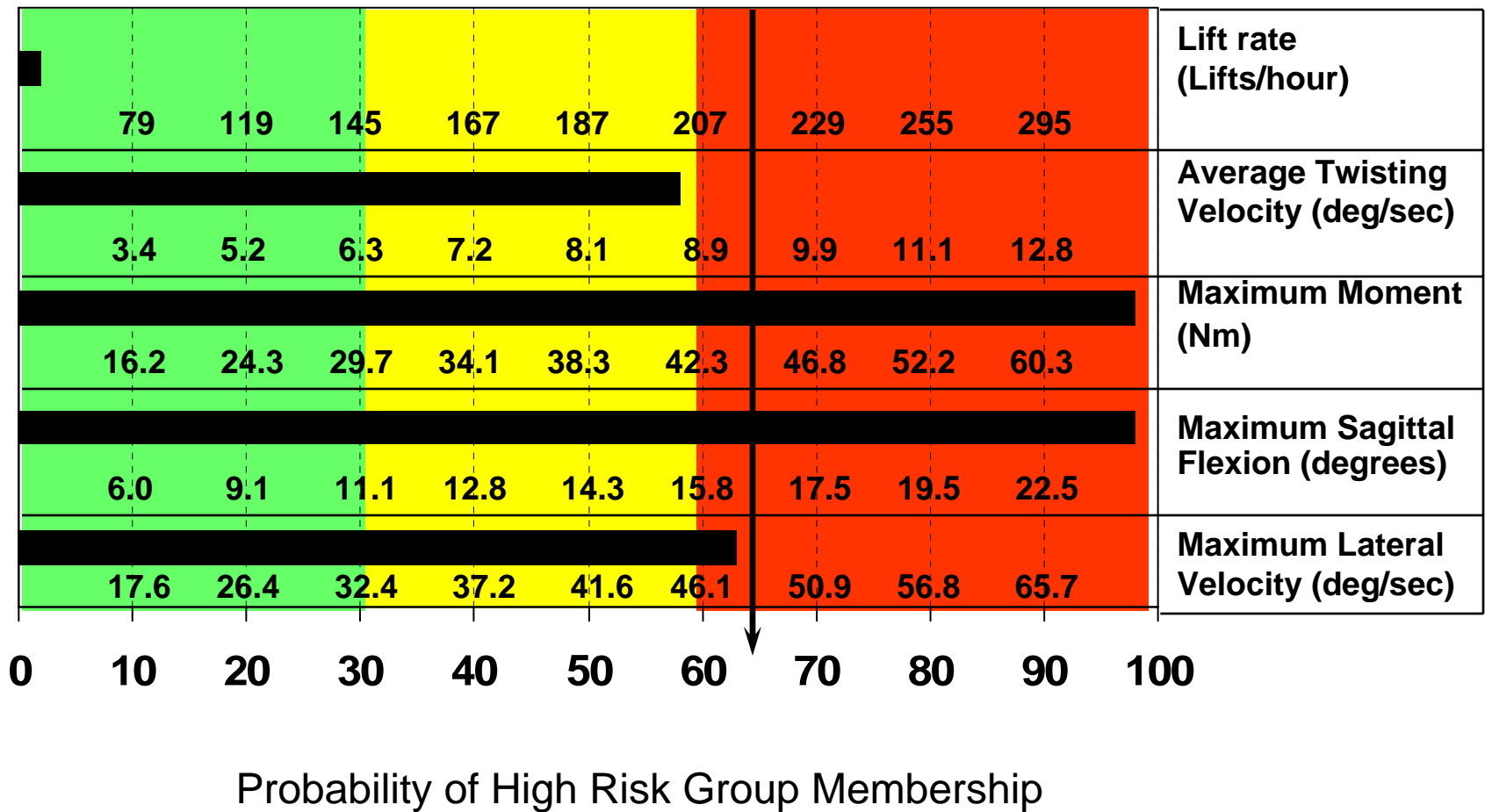
Subtask: Swing Legs into Bed

Average Probability of Low Back Disorder Risk : 47%



Overall Task Risk : Cardiac Chair to Bed in Higher Position

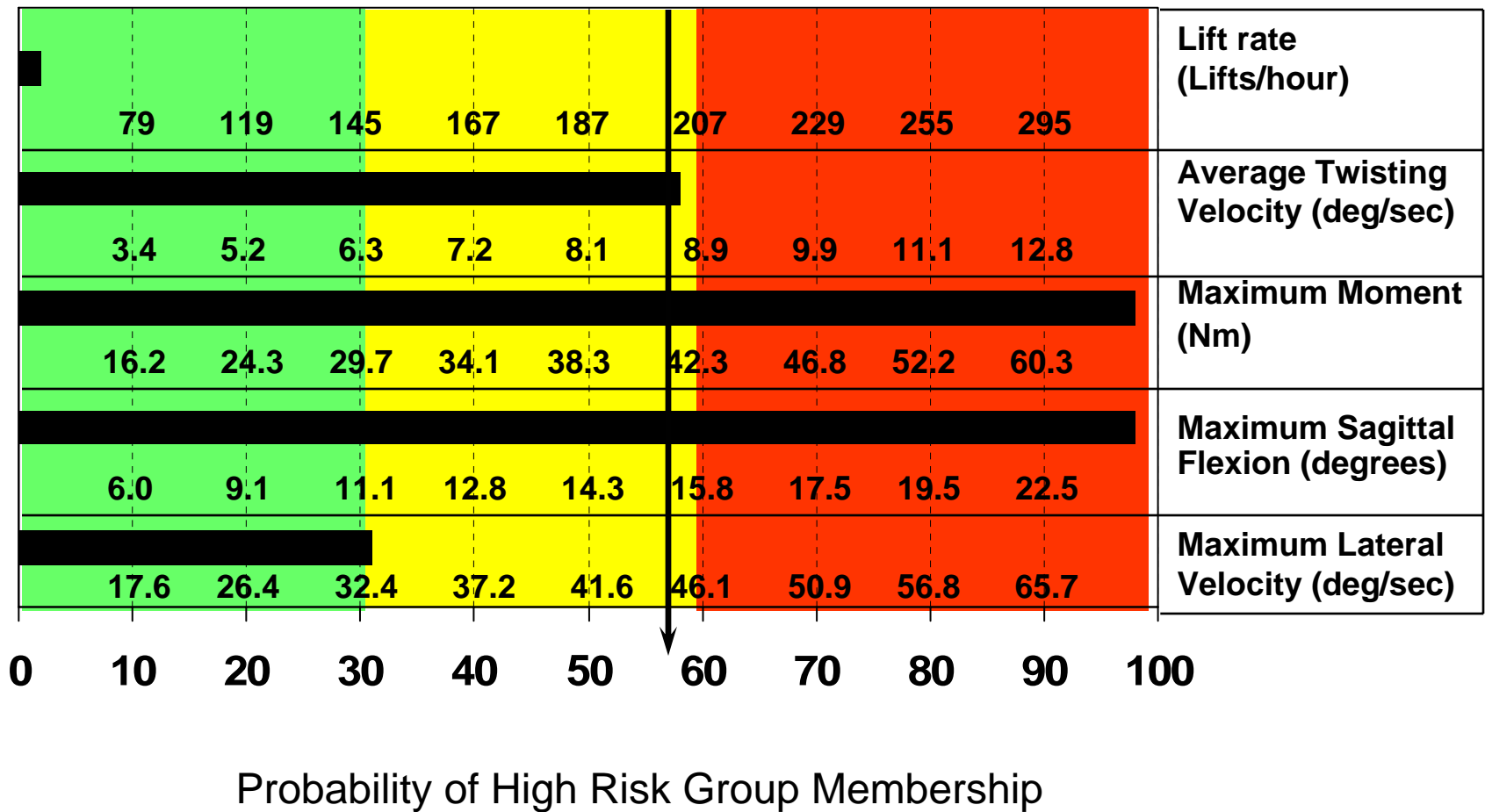
Average Probability of Low Back Disorder Risk : 64%



Task Risk : Cardiac Chair to Bed in Higher Position

Subtask: Stand Patient Up from Wheelchair

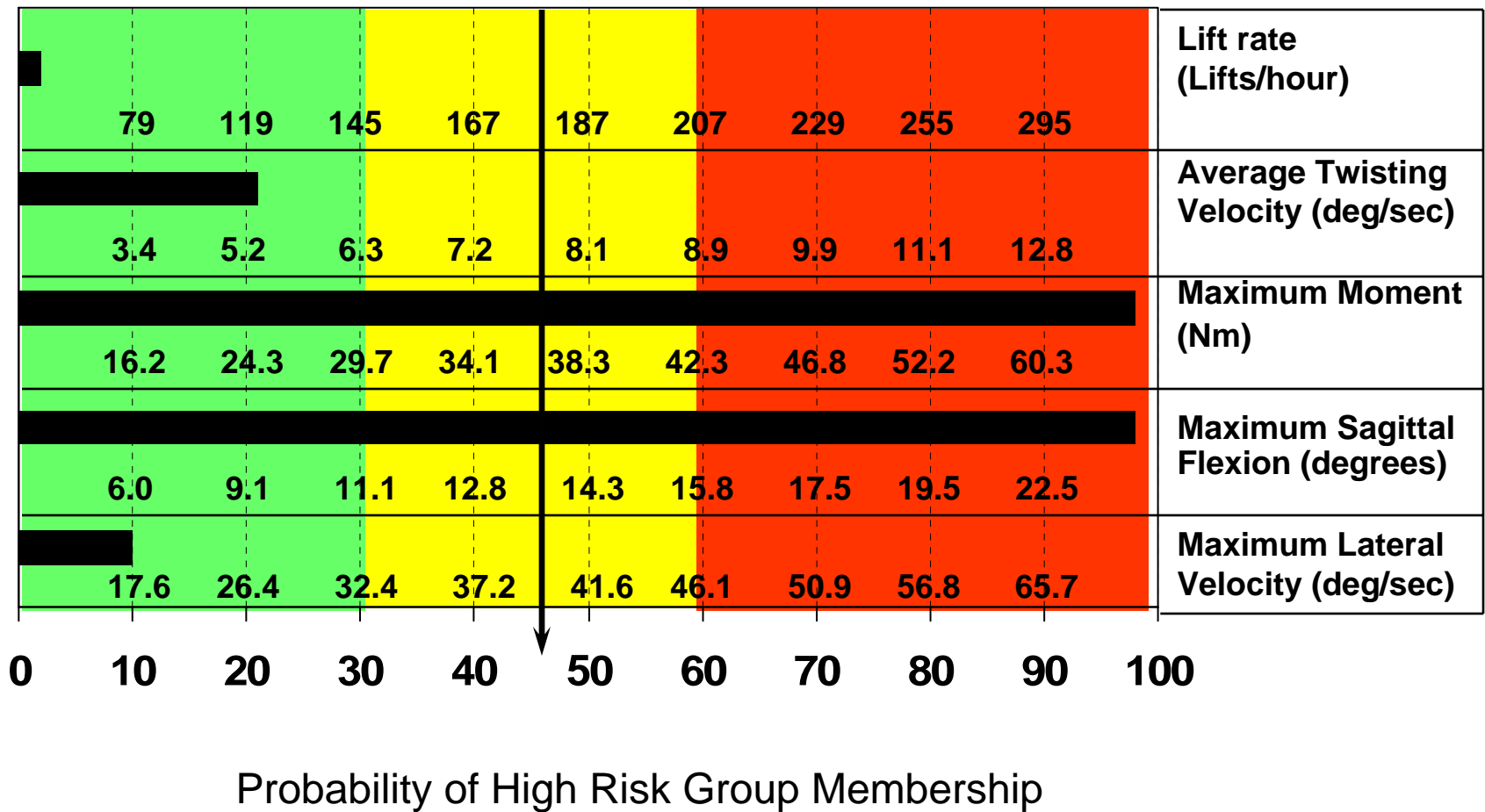
Average Probability of Low Back Disorder Risk : 57%



Task Risk : Cardiac Chair to Bed in Higher Position

Subtask: Lower Patient into Bed

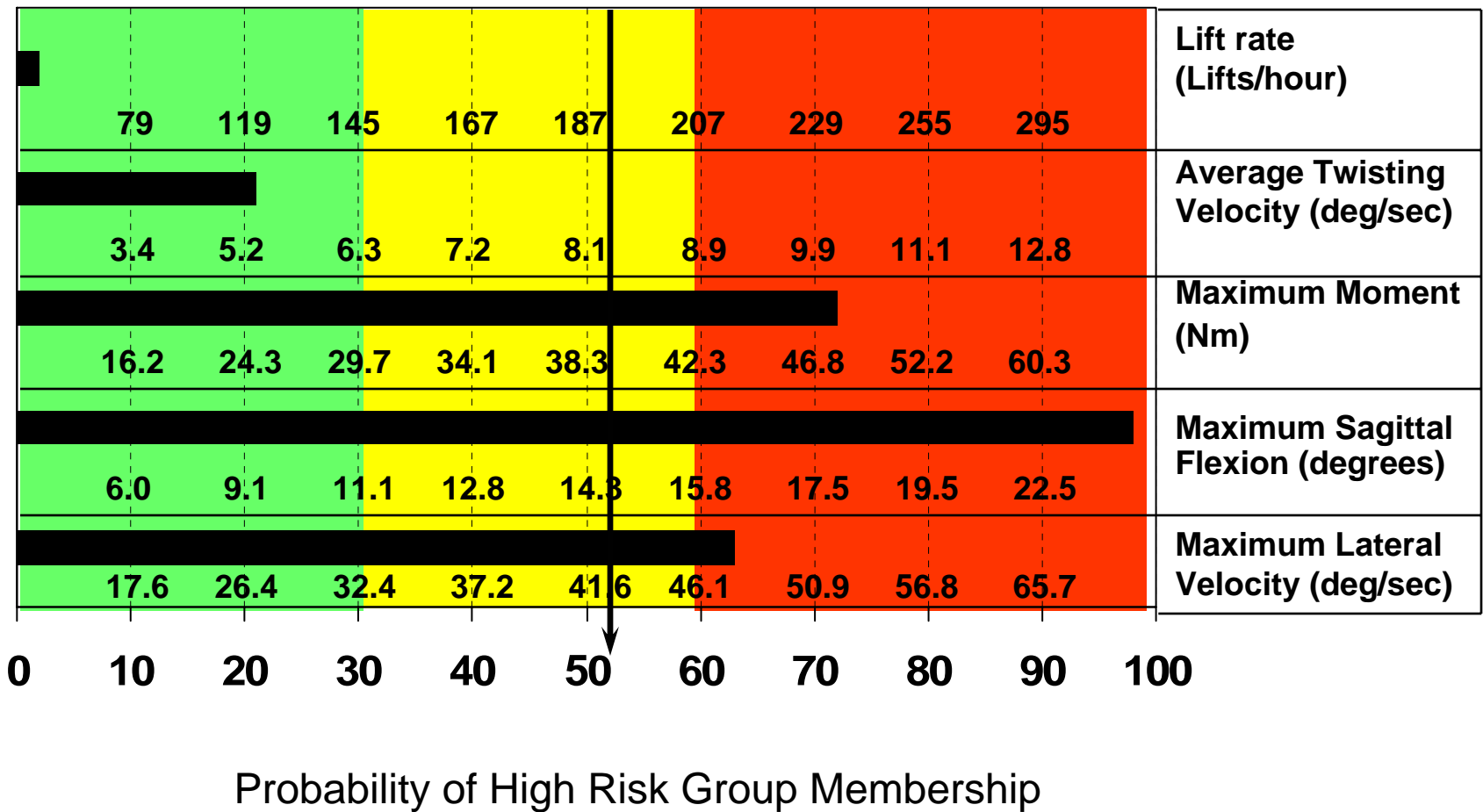
Average Probability of Low Back Disorder Risk : 46%



Task Risk : Cardiac Chair to Bed in Higher Position

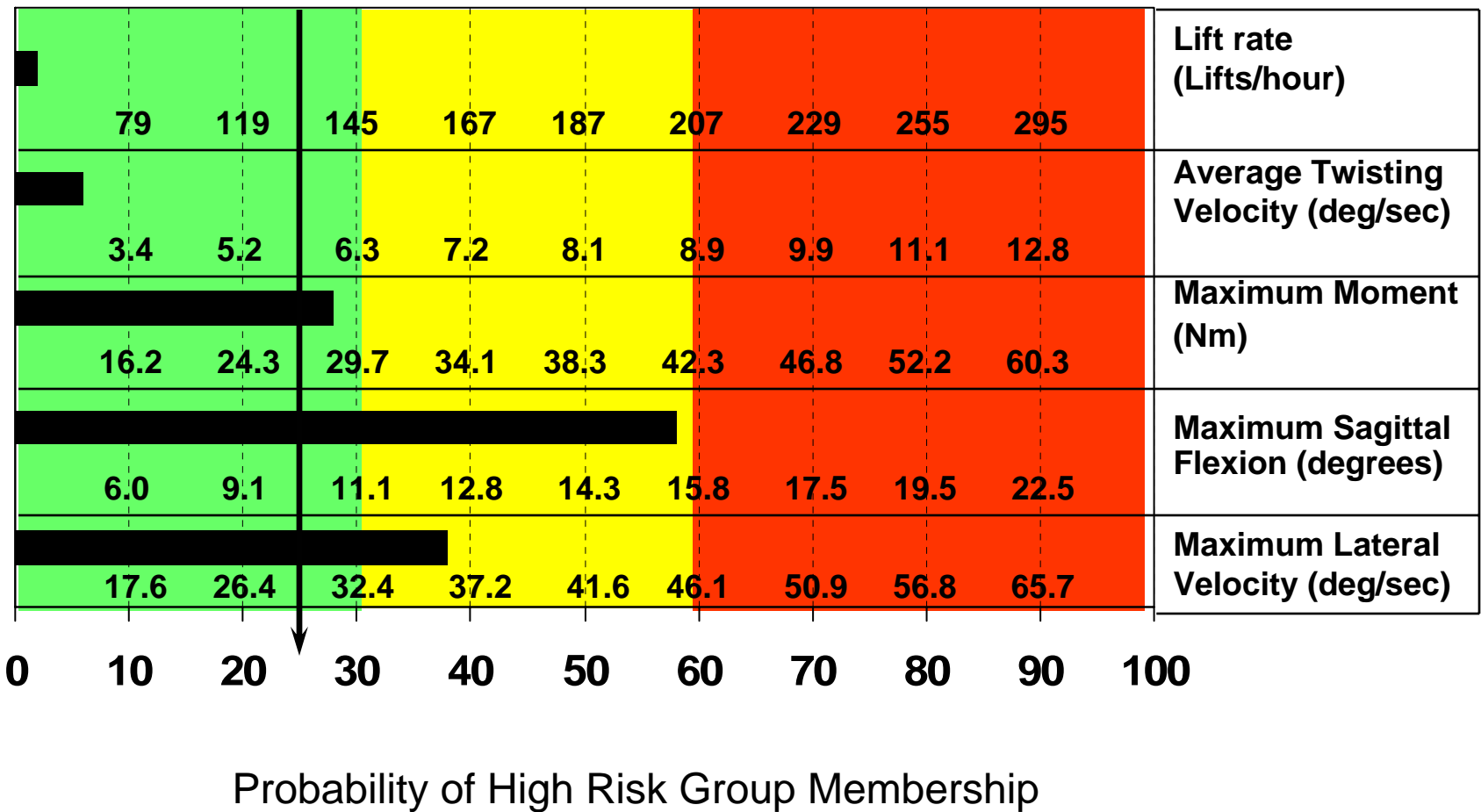
Subtask: Swing Legs into Bed

Average Probability of Low Back Disorder Risk : 51%



Overall Task Risk: Patient Lift Assist Device

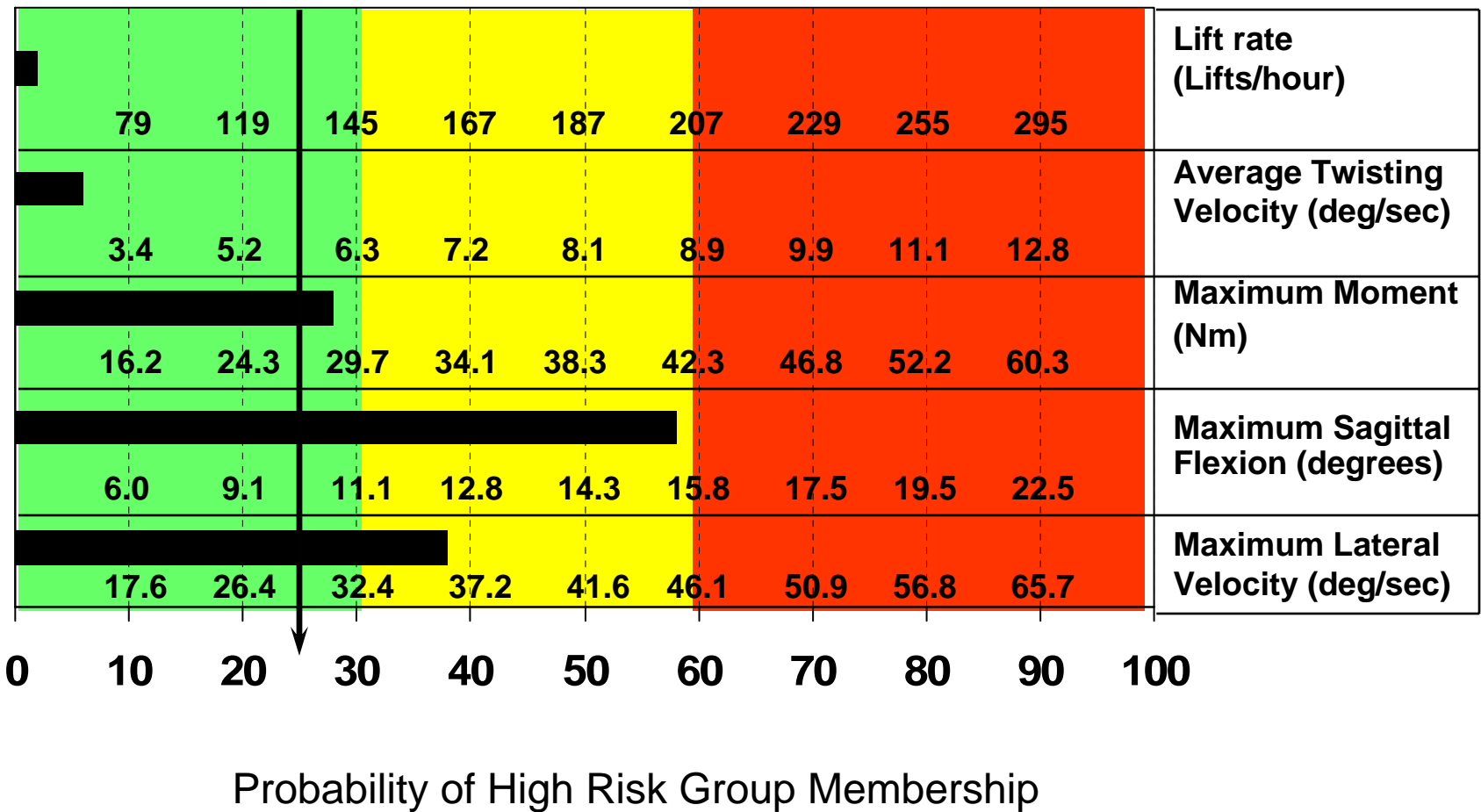
Average Probability of Low Back Disorder Risk : 26%



Task Risk: Patient Lift Assist Device

Subtask: Pump Lever to Raise Patient

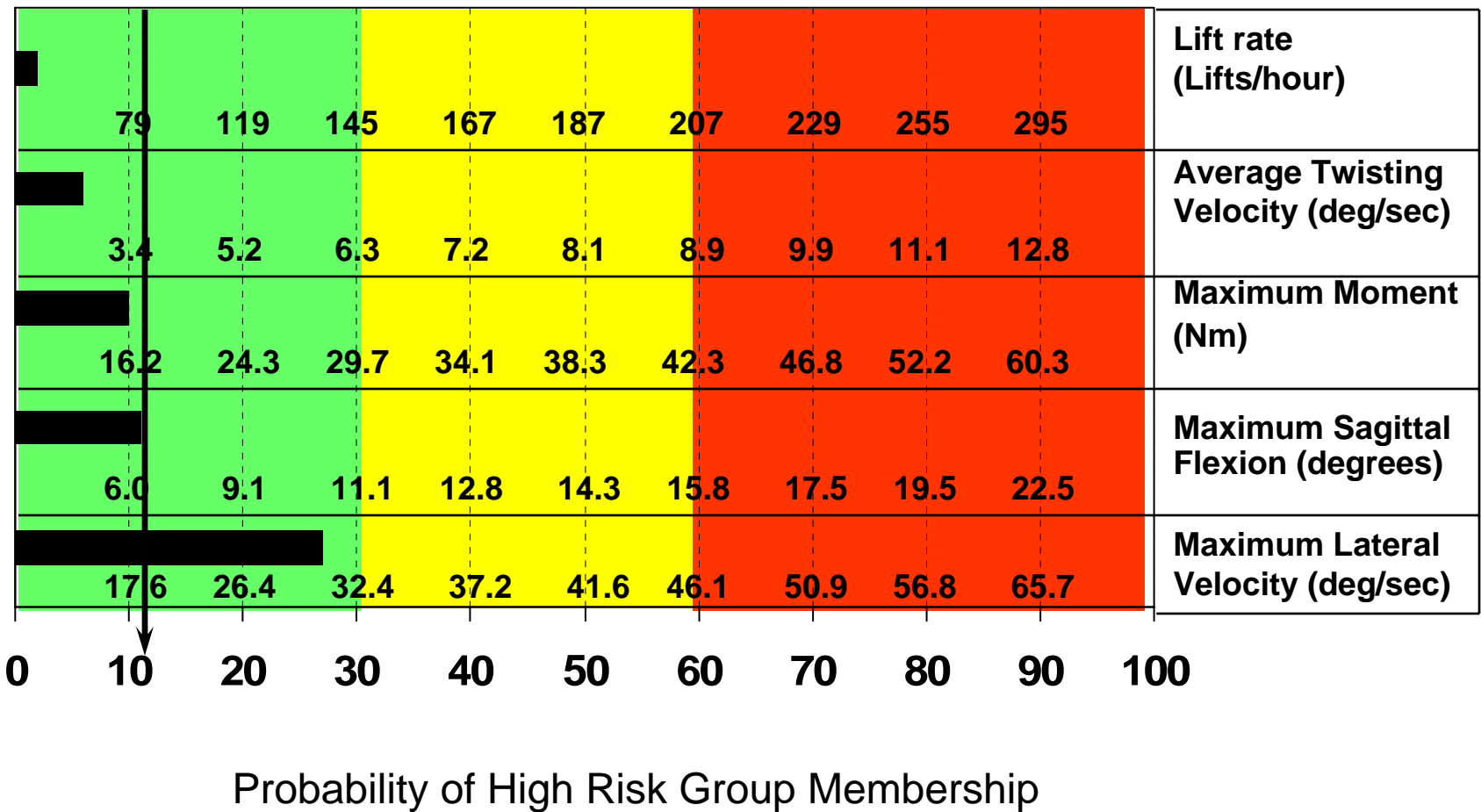
Average Probability of Low Back Disorder Risk : 26%



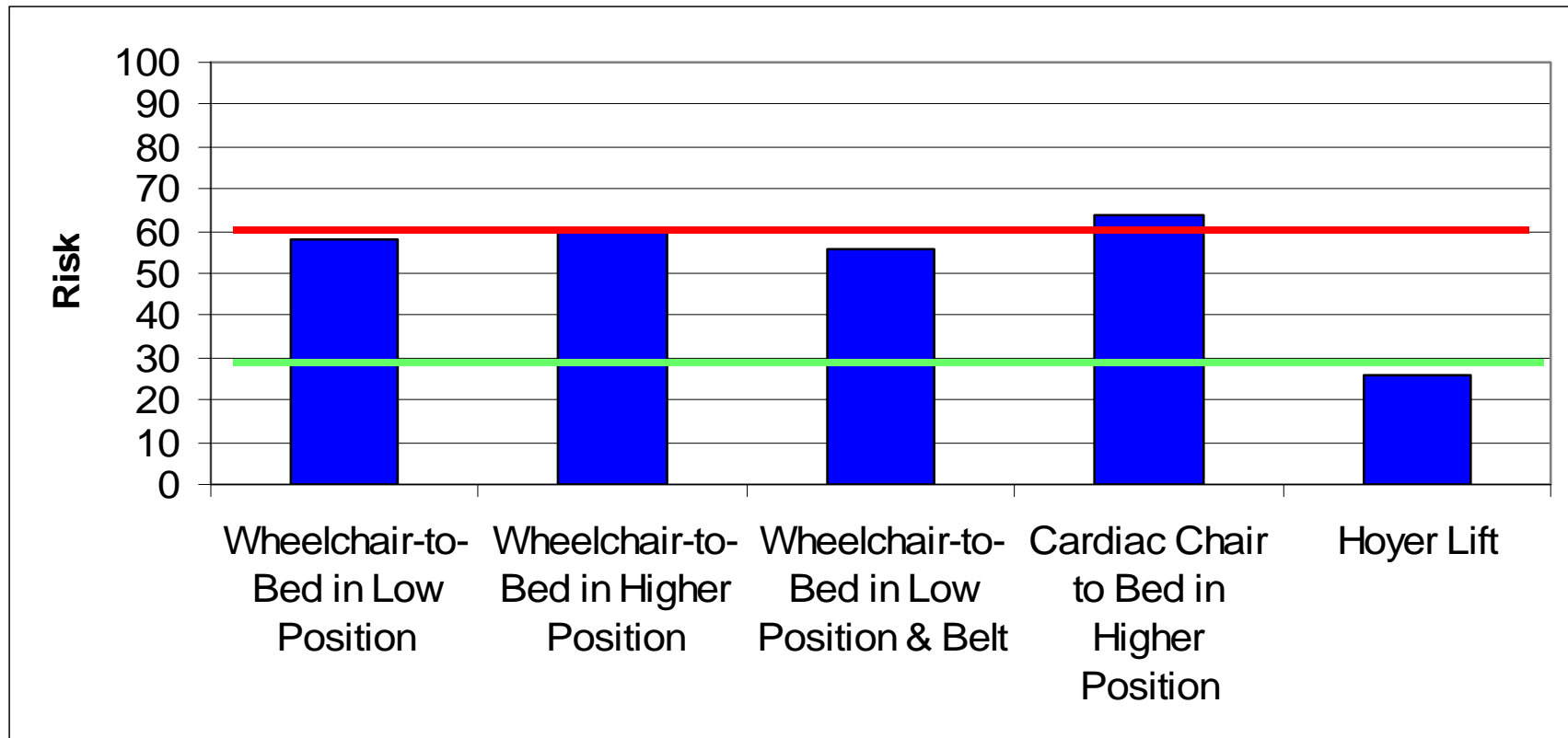
Task Risk: Patient Lift Assist Device

Subtask: Push Patient Lift Device to Bed

Average Probability of Low Back Disorder Risk : 11%



Summary of Risk Values as a Function of Task



Summary of Risk Values as a Function of Subtasks

