

Multiple Sclerosis Fall Risk Interventions

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1 Backwards Walking Fall Prediction

1.1 Edwards et al. 2020

Table 1: Edwards et al. 2020¹

Item	Study
n	38
Study type	Retrospective Cohort
Measure	
Dependent variable	“Fall diary”

1.1.1 Initial measures

Spatiotemporal measures of forward and backwards walking and fall history were collected¹.

1.1.2 Fall Risk Measures

For the following 6 months after, a fall diary was taken by participants¹

1.1.3 Fall risk contributors (associations)

Between forward vs backward velocity, vs stride length, double support time, age, disease severity and symptom duration, **backwards walking velocity** was the strongest unique predictor of falls. Accurately classified 76.3% of the cases¹. Forward walking classification of fallers was about 71.1%¹.

1. Edwards EM, Daugherty AM, Nitta M, Atalla M, Fritz NE. Backward walking sensitively detects fallers in persons with multiple sclerosis. *Multiple Sclerosis and Related Disorders*. 2020;45:102390. doi:[10.1016/j.msard.2020.102390](https://doi.org/10.1016/j.msard.2020.102390)