

Tool for Assessing Mobility in Wheelchair-Dependent Paraplegics

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Assessment Tool

General

Patients are assessed on their ability to perform six different tasks. For each task patients are scored on a six-point scale, with 6 representing the best score and 1 the worst. Patients must perform the tasks in the same order, as set out below. With tasks number 2 and 6, the patient may have three attempts with the best score recorded. The scores for each task were not designed to be added or combined in any way. If a test is not attempted, “not applicable” should be recorded, not a score of 1. For the tasks where assistance is quantified the following definitions apply:

Total assistance. A situation where the patient provides less than 25% of the effort required to complete the task and the clinician provides the remaining effort.

Maximal assistance. A situation where the patient provides between 25% and 49% of the effort required to complete the task and the clinician provides the remaining effort.

Moderate assistance. A situation where the patient provides between 50% and 74% of the effort required to complete the task and the clinician provides the remaining effort.

Minimal assistance. A situation where the patient provides between 75% and 99% of the effort required to complete the task and the clinician provides the remaining effort.

Supervision. A situation where the patient provides 100% of the effort to complete the task and the clinician provides either verbal prompts or supervision. However, the clinician does not provide any physical assistance.

Independent. A situation where the patient provides 100% of the effort required to complete the task and the patient does not require any supervision or verbal prompts.

Task 1: Supine to long sitting

This task involves the patient moving from supine to long sitting on a wide plinth. The patient must not hold on to the side of the plinth or any external aids (eg trapeze).

A score of 1 indicates that the patient completes the task with total assistance.

A score of 2 indicates that the patient completes the task with maximal assistance.

A score of 3 indicates that the patient completes the task with moderate assistance.

A score of 4 indicates that the patient completes the task with minimal assistance.

A score of 5 indicates that the patient completes the task with supervision.

A score of 6 indicates that the patient completes the task independently.

Task 2: Horizontal transfer

This task involves the patient transferring from their normal wheelchair to a plinth that is the same height as the top of their seat cushion. The front corner of the wheelchair must be 20 cm from the plinth. Subjects may use a slide board, but this will lower their score by one point.

A score of 1 indicates that the patient completes the transfer with total assistance.

A score of 2 indicates that the patient completes the transfer with maximal assistance.

A score of 3 indicates that the patient completes the transfer with moderate assistance.

A score of 4 indicates that the patient completes the transfer with minimal assistance.

A score of 5 indicates that the patient completes the transfer with supervision.

A score of 6 indicates that the patient completes the transfer independently.

Task 3: Vertical transfer

This task involves the patient transferring from the floor back into their wheelchair. To complete the task independently the patient must be sitting on their cushion in their wheelchair. The wheelchair may be put on the plinth, if the patient does not wish to transfer onto the floor.

A score of 1 indicates that the patient completes the transfer with total assistance.

A score of 2 indicates that the patient completes the transfer with maximal assistance.

A score of 3 indicates that the patient completes the transfer with moderate assistance.

A score of 4 indicates that the patient completes the transfer with minimal assistance.

A score of 5 indicates that the patient completes the transfer with supervision.

A score of 6 indicates that the patient completes the transfer independently.

Task 4: Push on flat

This task involves the patients pushing their wheelchair on level ground. Two marks (or objects eg witches hats) must be placed 25 m apart on level ground. The task requires the patient to push from one mark, around the second mark and back to the original mark. Timing starts and finishes when the front wheel moves past the first mark. One circuit is defined as pushing 50 metres, ie pushing from the first marker to the second marker and back to the first.

A score of 1 indicates that the patient cannot independently push 25 m (ie, 0.5 of a circuit) in less than 1 min.

A score of 2 indicates that the patient independently pushes 25 m (ie, 0.5 of a circuit) in less than 1 min, but cannot independently push 50 m in less than 1 min.

A score of 3 indicates that the patient independently pushes 50 m (ie, 1 circuit) in less than 1 min, but cannot independently push 200 m (ie, 4 circuits) in less than 4 min.

A score of 4 indicates that the patient independently pushes 200 m (ie, 4 circuits) in less than 4 min, but cannot independently push 200 m (ie, 4 circuits) in less than 3 min.

A score of 5 indicates that the patient independently pushes 200 m (ie, 4 circuits) in less than 3 min, but cannot independently push 200 m (ie, 4 circuits) in less than 1.5 min.

A score of 6 indicates that the patient independently pushes 200 m (ie, 4 circuits) in less than 1.5 min.

Task 5: Push on ramp

This task involves the patient pushing their wheelchair on a 1 : 12 ramp. Two marks (or objects, eg witches hats) must be placed on the ramp 15 metres apart. The task requires the patient to push from the bottom mark, up the ramp, around the second mark and back down to the original mark. Timing starts and finishes when the front wheel moves past the mark. One circuit is defined as pushing 30 metres, ie, from the first marker, up to the second marker and back down to the first.

A score of 1 indicates that the patient cannot independently push up or down the ramp.

A score of 2 indicates that the patient independently pushes either up or down the ramp but not both.

A score of 3 indicates that the patient independently pushes up and down the ramp (ie, completes 1 circuit) but takes more than 2 min.

A score of 4 indicates that the patient independently pushes up and down the ramp (ie, completes 1 circuit) in less than 2 min, but not in less than 1 min.

A score of 5 indicates that the patient independently pushes up and down the ramp (ie, completes 1 circuit) in less than 1 min, but not in less than 15 s.

A score of 6 indicates that the patient independently pushes up and down the ramp (ie, completes 1 circuit) in less than 15 s.

Task 6: Negotiate kerbs

This task involves the patient pushing up kerbs in their wheelchair. A small kerb is defined as one that is approximately 2.5 cm high and a large kerb is defined as one that is 15 cm high. The task requires the patient to start below the kerb, push up the kerb and finish above the kerb.

A score of 1 indicates that the patient cannot independently push up a small kerb.

A score of 2 indicates that the patient independently pushes up a small kerb, but cannot achieve score 3.

A score of 3 indicates that the patient pushes up a large kerb with a pole and minimal assistance.

A score of 4 indicates that the patient pushes up a large kerb with minimal assistance.

A score of 5 indicates that the patient pushes up a large kerb with supervision.

A score of 6 indicates that the patient independently pushes up a large kerb.