Berg Balance Scale (BBS) Instructions

Completed at stage 1B): unable to stand independently/Needs partial assistance of gait aid and/or orthoses (except bilateral KAFOs) and/or therapist(s) to stand. The use of Bilateral KAFOs is not allowed. Voluntary L/E Movement (L/E MMTs of Gr 1+/2- to Gr 3- in anti-gravity muscles which are Tib Ant, Soleus, Quads, Glutei).

Example of Standing with Assistance:

Patient stands in parallel bars/walker/bedside without total assistance of another person or walking aid and therapist assistance to maintain upright posture. Patient may have only partial weight bearing through the U/Es with weight bearing through the feet. Patient may have L/E orthoses on except for Bilateral KAFOs.

Time needed to complete: approximately 20 minutes

Equipment needed:

- Stopwatch or wristwatch with a second hand
- a ruler or other indicator of 2, 5, and 10 inches (5, 13 and 25 cm)
- two standard chairs (one with arm rests, one without)
- either a step or a stool (of average step height).

Therapist Instructions:

- Please document each task and/or give instructions as written. When scoring, please record the lowest response category that applies for each item. Each item is scored on a 5 point scale (0 = cannot perform) to 4 (normal performance). The total of the 14 questions is calculated.
- Subject should understand that they must maintain their balance while attempting the tasks. The choices of which leg to stand on or how far to reach are left to the subject. Poor judgment will adversely influence the performance and the scoring. Subjects can wear their usual shoes and braces, if necessary, during testing. Assessments are conducted without the subjects’ walking assistive device if they use one.

Patient Instructions: Described on test sheet for each task

Scoring: The scores for all questions are added up to give a total score.

Clinical Reference Values:

Not available for SCI. In older adults:

**Interpretation:**

- 41-56 = low fall risk
- 21-40 = medium fall risk
- 0 – 20 = high fall risk


**Minimal Detectable Change:**

“A change of 4 points is needed to be 95% confident that true change has occurred if a patient scores within 45-56 initially, 5 points if they score within 35-44, 7 points if they score within 25-34 and, finally, 5 points if

In SCI:

Norms (AIS D only):

<table>
<thead>
<tr>
<th>Population</th>
<th>BBS score: mean (SD), range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individuals with SCI (n=32)</td>
<td>47.9 (10.7), 17-56</td>
</tr>
<tr>
<td>Paraplegia (n=15)</td>
<td>44.8 (13.0), 17-56</td>
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<tr>
<td>Tetraplegia (n=17)</td>
<td>50.7 (7.5), 31-56</td>
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