

Age-Friendly Mobility Assessment Tools



An initiative of The John A. Hartford Foundation and the Institute for Healthcare Improvement (IHI) in partnership with the American Hospital Association (AHA) and the Catholic Health Association of the United States (CHA). There are numerous available assessment tools for mobility, several of which are described below. Keep in mind as you are choosing your tool, that our goal is to assess mobility, not just fall prevention. Other factors to consider are: your population, and practical aspects of the tests' administration.

- *Timed Up and Go (TUG)¹ or Get Up and Go²: Patients are asked to rise from a standard chair, walk a distance of 3 meters (10 feet), turn 180 degrees, walk back to the chair and sit down. Use of an ambulatory device is acceptable. For the TUG, the time it takes to complete the activity is recorded with shorter times indicating better performance. For the Get Up and Go, a qualitative assessment of the patient's ability to complete all parts of the test is documented.
- Short Physical Performance Battery (SPPB)³ or Gait speed alone⁴: The SPPB has three components, hierarchical balance assessment, a 5 times sit to stand test and a short usual gait speed over a 3 meter (10 foot) distance. Scores range from 0 12 with higher scores indicating better performance. Gait speed alone asks the patient to walk at their usual speed over a distance that ranges from 3 8 meters. The resulting score is in meters per second.
- *Performance-Oriented Mobility Assessment/Tinetti Mobility Test⁵: Includes 13 balance tasks and 9 items for gait assessment. A number of versions with modifications have been developed which shorten the assessment time. Higher scores indicate better gait and balance performance.
- 4. 4 Item Dynamic Gait Index (DGI)⁶: Developed to examine functional stability during gait activities. The four components include: Horizontal head turns; Vertical head turns; Gait on level surfaces; and Changes in gait speed. Need to have a distance of 20 feet to complete the test. Each item is scored from 0 3, with higher scores indicating better function.
- 5. Hierarchical Assessment of Balance and Mobility (HABAM)⁷: HABAM provides a clinical assessment of in-bed mobility, transfers and ambulation. The patient is asked to stand, transfer from the bed and walk as far as they are safely able. Their performance is observed and recorded for each of the three domains being measured (balance, transfer and mobility). Scores range from 0 28 with higher scores indicating better performance.

Setting: Hospital

 *Johns Hopkins Highest Level of Mobility Scale⁸: THE JH-HLM scale is a nurse assessment that documents a patient's mobility during the shift and ranges from 1 (lying in bed) to 8 (walked 250+ feet). It has been validated in the hospital setting by comparing nursing and physical therapy assessments.

Setting: Hospital

7. **Banner Mobility Assessment Tool**⁹: The MAT has 4 assessment levels that include: Sit and shake (hands), stretch and point, stand, and walk. Patients are rated as pass or fail for each of the progressively more difficult levels.

- 8. **Functional Independence Measure (FIM)**: The FIM is used by healthcare practitioners to assess and grade the functional status of a person based on the level of assistance they require. The FIM has a motor and a cognitive subscale. The most important component will be the assessment of transfers and locomotion.
- 9. AM-PAC (Activity Measure Post Acute Care) or 6 Clicks¹⁰: The AM-PAC consists of six domains: Applied Cognitive, Personal & Instrumental/Daily Activity, Movement & Physical/Basic Mobility, Communication, and Grooming and Hygiene. The sum of scores for each item provides a raw score from 6 to 24 that can be standardized to a t score. The AM-PAC "6-Clicks" instruments include basic mobility and daily activities. Scores range from 6 24 for both with lower scores indicating higher dependency.
- 10. Mobilizing Our Vulnerable Elders (MOVE).
- 11. **Spinal Cord Independence Measure (SCIM):** The Spinal Cord Independence Measure Version III (SCIM-III) is designed for individuals with spinal cord injury (SCI) and assesses performance in activities of daily living and mobility. Guidelines were created for 2 subscales: self-care (6 items) and mobility (9 items). A total score out of 60 can be obtained, with self-care scores ranging from 0-20 and mobility scores ranging from 0-40. Higher scores indicate increased independence.
- 12. **PROMIS Physical Function 5 (PF5)**: PROMIS PF is typically administered in a clinic setting. Because a minimal amount of time (less than 1 minute) is needed to complete the outcome measure, it can be easily administered to a patient before their initial evaluation. Since the outcome measure is a self-report survey with no direct observation by a licensed clinician, the patient's responses may not accurately reflect their actual level of function for each test item.

* Strongly recommended (included on the 4Ms Care Descriptions form).

References

¹ D. Podsiadlo and S. Richardson, "The timed "Up and Go": a test of basic functional mobility for frail elderly persons," J Amer Geriatr Soc, vol. 39, no. 2, pp. 142–148, 1991.

²S. Mathias, U. S. L. Nayak, and B. Isaacs, "Balance in elderly patients: the 'get-up and go' test," Arch Physical Medicine and Rehabilitation, vol. 67, no. 6, pp. 387–389, 1986.

³J. M. Guralnik, E. M. Simonsick, L. Ferrucci et al., "A short physical performance battery assessing lower extremity function: association with self-reported disability and prediction of mortality and nursing home admission," The Journals of Gerontology. Series A, Biological Sciences and Medical Sciences, vol. 49, no. 2, pp. M85–M94, 1994.

⁴ Mehmet H, Robinson SR, Yang AWH. Assessment of Gait Speed in Older Adults. J Geriatr Phys Ther. 2020 Jan/Mar;43(1):42-52. See video here: James K, Schwartz AW, Orkaby AR. Mobility Assessment in Older Adults. N Engl J Med. 2021 Aug 19;385(8):e22. doi: 10.1056/NEJMvcm2009406.

⁵ Tinetti Performance Oriented Mobility Assessment (POMA). <u>https://www.leadingagemn.org/assets/docs/Tinetti-Balance-Gait--POMA.pdf</u>

⁶ Marchetti GF, Whitney SL. Construction and validation of the 4-item dynamic gait index. Physical Therapy, 2006 Dec;86(12):1651-60.

⁷C. Macknight and K. Rockwood, "A hierarchical assessment of balance and mobility," Age and Ageing, vol. 24, no. 2, pp. 126–130, 1995.

⁸ Johns Hopkins Medicne. Johns Hopkins Medicine Activity and Mobility Promotion Clinician Guide- PREVIEW. <u>https://www.johnshopkinssolutions.com/wp-</u> <u>content/uploads/2017/11/AMP_Hospital_Sample_171023.pdf</u>

⁹ Boynton T, Kelly L, Perez A, Miller M, An Y, Trudgen C. Banner Mobility Assessment Tool for nurses: instrument validation. Am J Safe Patient Handl Mov. 2014;4:86–92.

¹⁰ Jette DU, Stilphen M, Ranganathan VK, Passek SD, Frost FS, Jette AM. AM-PAC "6-Clicks" functional assessment scores predict acute care hospital discharge destination. Phys Ther. 2014;94:1252–1261.