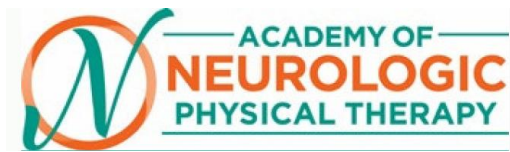


Functional Gait Assessment



Functional Gait Assessment	SS	APC	RPC
1. Gait level surfaces		PM	
2. Change in Gait Speed		PM	
3. Gait with Horizontal Head Turns		SP MT	
4. Gait with Vertical Head Turns		SP MT	
5. Gait and Pivot Turn		PM	
6. Step over Obstacle		PM	
7. Gait with Narrow Base of Support		PM	
8. Gait with Eyes Closed		SP	
9. Ambulating Backwards		PM SP	
10. Steps		PM	

Diagnosis	Fall risk cut-off	MDC/MCID
Stroke		Acute, subacute & chronic: 4.2 points
Parkinson's Disease	Inpatients (H&Y 1-4): <18/30 H&Y 1-4: <15/30	H&Y stage 1-3: 4.3 points
Vestibular		Acute: 6 points
Non-specific/Older Adults	< 22/30	Community Dwelling: 4 points

Equipment Needs

- Stopwatch
- Measuring device to mark off area
- Marked walking area = 20 ft (6m); width 12 in (30.48 cm)
- Obstacle of 9" height (22.9 cm) using 2 stacked shoeboxes
- Set of steps that are 7 ¾ in high with bilateral rails

ANPT Movement System Diagnoses for Balance Dysfunction Knowledge Translation Task Force

Handout created by:
Christina Burke, PT, DPT, NCS; Heidi Moyer, PT, DPT, GCS; Ana Sanchez Junkin, PT, DPT, NCS; Suzanne Trojanowski, PT, DPT, NCS; Wendy Kriekels, PT, DPT, NCS, Arco Paul, PT, PhD, NCS

KEY

Items suggestive of deficits in the areas indicated in the table.

SS = Steady state
APC = Anticipatory postural control
RPC = Reactive postural control

BC = Balance confidence
PV = Perception of verticality
PM = Postural movement strategies
SP = Sensory processing
MT = Multi-tasking

Considerations

- Individuals should walk without assistance of another person.
- Document any assistive device and/or bracing used.
- Some items specify a score based on use of an assistive device; if use of a device is not specified for scoring in a particular item, the patient should be tested without the device.
- Subsequent assessments should be completed with same device.

- Item-by-item scoring: [ANPT Functional Gait Assessment](#)

References:

1. Gill-Body KM, Hedman LD, Plummer L, et al. Movement System Diagnoses for Balance Dysfunction: Recommendations From the Academy of Neurologic Physical Therapy's Movement System Task Force. *Phys Ther.* 2021;101(9):pzab153. doi:10.1093/ptj/pzab153
2. Beninato M, Fernandes A, Plummer LS. Minimal clinically important difference of the functional gait assessment in older adults. *Phys Ther.* 2014;94(11):1594-1603. doi:10.2522/ptj.20130596
3. Leddy AL, Crowner BE, Earhart GM. Functional gait assessment and balance evaluation system test: reliability, validity, sensitivity, and specificity for identifying individuals with Parkinson disease who fall. *Phys Ther.* 2011;91(1):102-113. doi:10.2522/ptj.20100113
4. Lin JH, Hsu MJ, Hsu HW, Wu HC, Hsieh CL. Psychometric comparisons of 3 functional ambulation measures for patients with stroke. *Stroke.* 2010;41(9):2021-2025. doi:10.1161/STROKEAHA.110.589739
5. Marchetti GF, Lin CC, Alghadir A, Whitney SL. Responsiveness and minimal detectable change of the dynamic gait index and functional gait index in persons with balance and vestibular disorders. *J Neurol Phys Ther.* 2014;38(2):119-124. doi:10.1097/NPT.0000000000000015
6. Petersen CC, Steffen T, Paly E, Dvorak L, Nelson R. Reliability and minimal detectable change for sit-to-stand tests and the Functional Gait Assessment for individuals with Parkinson disease. *J Geriatr Phys Ther.* 2017; 40(4): 223-226. doi:10.1519/JPT.0000000000000102
7. Wrisley DM, Kumar NA. Functional gait assessment: concurrent, discriminative, and predictive validity in community-dwelling older adults. *Phys Ther.* 2010;90(5):761-773. doi:10.2522/ptj.20090069
8. Yang YY, Wang Y, Zhou Y, Chen C, Xing D, Wang C. Validity of the Functional Gait Assessment in patients with Parkinson's disease: construct, concurrent, and predictive validity. *Phys Ther.* 2014; 94 (3): 392-400. doi:10.2522/ptj.20130019