Amputee Mobility Predictor

The Amputee Mobility Predictor (AMP) is a performance outcome measure that measures the mobility of people with lower limb loss by assessing sitting and standing ability, balance, and gait attributes. It contains two sub-categories: AMP with use of a prosthesis (AMPPRO) and without use of a prosthesis (AMPnoPRO).

Please record the results of the performance maneuvers.

1.	Sitting balance	(0) Cannot sit upright independently for 60s(1) Can sit upright independently for 60s	
2.	Sitting reach	(0) Does not attempt(1) Cannot grasp or requires arm support(2) Reaches forward and successfully grasps item	
3.	Chair to chair transfer	(0) Cannot do or requires physical assistance(1) Performs independently, but appears unsteady(2) Performs independently, appears to be steady and safe	
4.	Arises from a chair	(0) Unable without help (physical assistance)(1) Able, uses arms / assist device to help(2) Able, without using arms	
5.	Attempts to arise from a chair	(0) Unable without help (physical assistance)(1) Able requires >1 attempt(2) Able to rise 1 attempt	
6.	Immediate standing balance	(0) Unsteady (staggers, moves foot, sways)(1) Steady using walking aid or other support(2) Steady without walker or other support	

7.	Standing balance	(0) Unsteady(1) Steady but uses walking aid or other support(2) Standing without support	
	Single-limb standing balance Sound side	(0) Unsteady(1) Steady but uses walking aid or other support for 30s(2) Single-limb standing without support for 30s	
(b)	Prosthetic side	(0) Unsteady(1) Steady but uses walking aid or other support for 30s(2) Single-limb standing without support for 30s	
9.	Standing reach	(0) Does not attempt(1) Cannot grasp or requires arm support on assistive device(2) Reaches forward and successfully grasps item no support	
10.	. Nudge test	(0) Begins to fall(1) Staggers, grabs, catches self, or uses assistive device(2) Steady	
11.	. Eyes closed	(0) Unsteady or grips assistive device(1) Steady without any use of assistive device	
12.	Picking up objects off the floor	(0) Unable to pick up object and return to standing(1) Performs with some help (table, chair, walking aid, etc.)(2) Performs independently (without help from object or person)	
13.	Sitting down	(0) Unsafe (misjudged distance, falls into chair)(1) Uses arms, assistive device, or not a smooth motion(2) Safe, smooth motion	

14. Initiation of gait	(0) Any hesitancy or multiple attempts to start (1) No hesitancy	
15. Step length and height (a) Swing foot	(0) Does not advance a minimum of 12in (30cm) (1) Advances a minimum of 12in (30cm) Prosthesis So	ound
(b) Foot clearance	 (0) Foot does not completely clear floor without deviation (1) Foot completely clears floor without marked deviation 	ound
16. Step continuity	(0) Stopping or discontinuity between steps (stop & go gait) (1) Steps appear continuous	
17. Turning	 (0) Unable to turn, requires intervention to prevent falling (1) Greater than 3 steps but completes task without intervention (2) No more than 3 continuous steps with or without assistive aid 	
18. Variable cadence	(0) Unable to vary cadence in a controlled manner(1) Asymmetrical increase in cadence controlled manner(2) Symmetrical increase in speed in a controlled manner	
19. Stepping over obstacle	(0) Cannot step over the box(1) Catches foot, interrupts stride(2) Steps over without interrupting stride	
20. Stairs (a) Ascending	(0) Unsteady, cannot do(1) One step at a time, or must hold on to railing or device(2) Steps over step, does not hold onto the railing or device	

AMPPRO □	AMPnoPRO □	Total Score:	
	(5) None		
	(4) Cane (straight or quad)		
	(3) Crutches (axillary or forearm)		
23.20	(2) Walker		
device selection	(1) Wheelchair		
21. Assistive	(0) Bed bound		
	(2) Steps over step, does not hold on	to the railing or device	
	(1) One step at a time, or must hold o	n to railing or device	
(b) Descending	(0) Unsteady, cannot do		

Interpretation

The score is represented on a 0-47 scale for AMPPRO and a 0-43 scale for AMPnoPro where a higher score corresponds to a more positive outcome.

Normative data for lower limb amputees has been established according to K Levels:

	AMPnoPRO	AMPPRO
K0	N/A	0 - 8
K1	9.7 ± 9.5	25.0 ± 7.4
K2	25.3 ± 7.3	34.7 ± 6.5
K3	31.4 ± 7.4	40.5 ± 3.9
K4	38.5 ± 3.0	44.7 ± 1.8

Minimal Detectable Change (MDC)

Unilateral Lower Limb Amputation with prosthesis: MDC = 3.4.

These are published values for specific populations and provide guidance if the patient does not have the listed condition.

Selected References

- Gailey RS, Roach KE, Applegate EB, et al. The amputee mobility predictor: an instrument to assess determinants of the lower-limb amputee's ability to ambulate. *Arch Phys Med Rehabil*. 2002;83(5):613-627. doi:10.1053/apmr.2002.32309
- 2. Resnik L, Borgia M. Reliability of outcome measures for people with lower-limb amputations: distinguishing true change from statistical error. *Phys Ther*. 2011;91(4):555-565. doi:10.2522/ptj.20100287