SOP #2015

10 Meter Walk Test (10MWT)

- Always review the SOP before beginning administration of the measurement tool.
- Always read the SOP instructions verbatim to the participant.
- Never modify the procedure or instructions (a modified test is invalid/incomplete).
- Always notify the coordinator if you have any doubt or questions about the SOP.

Description

The 10 Meter Walk Test (10mWT) is a performance measure that assesses walking speed over a short distance under two different conditions, at a comfortable speed and at maximum speed.



The time required to walk 10 meters, first at a comfortable speed, then at maximum speed, is recorded.

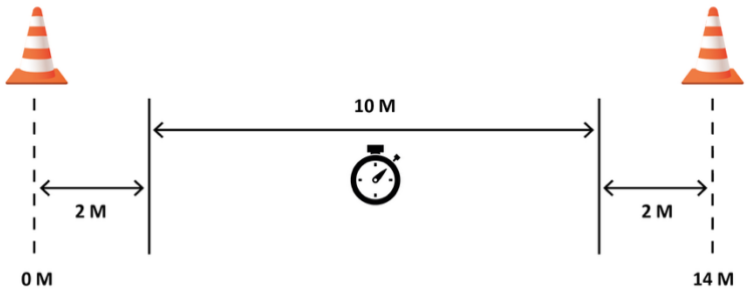
Equipment

□ Stopwatch	□ Brightly coloured adhesive tape
□ 2 brightly coloured cones (optional)	□ Gait belt
□ Corridor or open space, preferably at least 15 m in length	

Equipment preparation

□ A 10-meter walking course is measured and marked on the floor with brightly coloured adhesive tape. A marking (tape or cone) is placed 2 meters before and 2 meters after the 10-meter course.

□ The corridor is ensured to be clear, quiet, and safe for test administration.The corridor is ensured to be clear, quiet, and safe for test administration.



*The addition of a 2 meter mark before and after the 10 meter course removes the effect of acceleration at the start line and deceleration before the finish line.

Participant preparation

□ The participant must wear comfortable clothing and shoes suitable for walking.

□ If the participant is wearing unsuitable shoes that could affect the test result, the test can be done barefoot; however, the examiner must note this on the scoring sheet.

□ Orthotics or walking aids used during the test must be noted on the scoring sheet. The same orthotics or walking aids must be used during subsequent visits for the same data collection.

Examiner instructions

□ The examiner must place a gait belt on the participant prior the start of the test.

□ The participant is instructed to walk toward the marking (tape or cone) located at the end of the 14-meter course. The participant is not informed that the brightly coloured adhesive tape on the floor marks the finish line at 12 meters.

□ If the participant drops a walking aid, is very unsteady, or falls, the test is stopped. The trial is recorded as invalid, and the reason is documented on the scoring sheet.

Test administration

Demonstration
The examiner does not demonstrate the task for this test.

Practice
No practice trial is provided for the participant.

Procedure

Comfortable walking speed

1. The standardized instructions are provided to the participant: *"This test involves walking a distance of 10 meters at your usual comfortable walking speed. The test will start when I say 'Go!' and will end when I say 'Stop!' During the test, I will not encourage you. Do you have any questions?"*
2. The participant is positioned at the start of the course (0 m). Prior to the trial, the participant is instructed to: *"Walk in a straight line at your usual comfortable speed until I say 'Stop!'. Start walking when I say 'Go!'"*
3. The examiner must follow the participant at a distance of approximately one meter during the test. If the participant is at risk of falling, the examiner must follow the participant more closely, while influencing the walking speed as little as possible.
4. When the participant indicates readiness, the start signal is given: *"Are you ready? Go!"*
5. The stopwatch is started when the participant's leading foot toes cross the 2 meter mark and stopped when the leading foot crosses the 12 meter finish line. The participant then continues walking to the 14 meter mark, at which point the verbal signal *"Stop"* is given.

Maximum walking speed

1. The standardized instructions are provided to the participant: "This test involves walking a distance of 10 meters at your maximum speed. The test will start when I say 'Go!' and will end when I say 'Stop!'. During the test, I will not encourage you. Do you have any questions?"
2. The participant is positioned at the start of the course (0 m). Prior to the trial, the participant is instructed to: "Walk in a straight line as fast as possible, walking and not running, until I say 'Stop!'. Start walking when I say 'Go!'"
3. The examiner must follow the participant at a distance of approximately one meter during the test. If the participant is at risk of falling, the examiner must follow the participant more closely, while influencing the walking speed as little as possible.
4. When the participant indicates readiness, the start signal is given: *"Are you ready? Go!"*
5. The stopwatch is started when the participant's leading foot toes cross the 2 meter mark and stopped when the leading foot crosses the 12 meter finish line. The participant then continues walking to the 14 meter mark, at which point the verbal signal *"Stop"* is given.

Trial(s)

A single trial is done for comfortable walking speed and maximum walking speed; however, a second trial must be performed if the first trial is considered invalid for either condition (comfortable walking speed and maximum walking speed).

Result

The time required, in seconds (to the nearest tenth of a second), is recorded on the scoring sheet. The validity of the result for each trial must be recorded on the scoring sheet (valid or invalid).

References
1. Bohannon RW. Comfortable and maximum walking speed of adults aged 20-79 years: reference values and determinants. Age Ageing 1997;26:15-19.
2. Watson MJ. Refining the ten-meter walking test for use with neurologically impaired people. Physiotherapy 2002;88:386-397.
3. Hammarén E, Ohlsson JA, Lindberg C, Kjellby-Wendt G. Reliability of static and dynamic balance tests in subjects with myotonic dystrophy type 1. Adv Physiother 2012;14:48-54.
4. Graham JE, Ostir GV, Fisher SR, Ottenbacher KJ. Assessing walking speed in clinical research: a systematic review. J Eval Clin Pract 2008;14:552-62.