

D-MT06: 10 metre Walk Test (10mWT)

Scope and objectives of clinical task

This CTI will enable the Allied Health Assistant (AHA) to:

- safely and effectively administer the 10 metre walk test and record the results.

Note: There are multiple protocols available for the 10 metre walk test. The health service will determine the protocol to be used in the local setting. If a protocol is used that differs to that in the task procedure of this CTI this should be recorded on the Performance Criteria Checklist.

VERSION CONTROL

Version: 1.0

Endorsed: (Professional)	Statewide Directors of Physiotherapy	Date approved:	25/06/2020
Approved: (Operational)	Chief Allied Health Officer, Allied Health Professions' Office of Qld.	Date approved:	3/09/2020
Document custodian:	Chief Allied Health Officer, Allied Health Professions' Office of Qld.	Review date:	3/09/2023
Acknowledgements:	Sunshine Coast Hospital and Health Service		

The CTI reflects best practice and agreed process for conduct of the task at the time of approval and should not be altered. Feedback, including proposed amendments to this published document, should be directed to AHPOQ at: allied_health_advisory@health.qld.gov.au.

This CTI should be used under a delegation framework implemented at the work unit level. The framework is available at:

<https://www.health.qld.gov.au/ahwac>

Please check <https://www.health.qld.gov.au/ahwac/html/clintaskinstructions.asp> for the latest version of this CTI.

© State of Queensland (Queensland Health) 2020



This work is licensed under a Creative Commons Attribution Non-Commercial No Derivatives 3.0 Australia licence. This work is licensed under a Creative Commons Attribution Non-Commercial No Derivatives 3.0 Australia licence. In essence, you are free to copy and communicate the work in its current form for non-commercial purposes, as long as you attribute Queensland Health and authoring unit listed above, and abide by the licence terms. You may not alter or adapt the work in any way. To view a copy of this licence, visit <http://creativecommons.org/licenses/by-nc-nd/3.0/au/deed.en>.

For further information contact Allied Health Professions' Office of Queensland, PO Box 2368, Fortitude Valley BC QLD 4006, email allied_health_advisory@health.qld.gov.au, phone (07) 3328 9298. For permissions beyond the scope of this licence contact: Intellectual Property Officer, Queensland Health, GPO Box 48, Brisbane Qld 4001, email ip_officer@health.qld.gov.au, phone (07) 3328 9862.

Disclaimer

Queensland Health has made every effort to ensure that the information in this resource, at the time of distribution, is correct. The information in this resource will be kept under review and future publications will incorporate any necessary amendments.

The information in this resource does not constitute clinical advice and should not be relied upon as such in a clinical situation. The information is provided solely on the basis that readers will be responsible for making their own assessment of the matters presented herein and readers are advised to verify all relevant representations, statements and information. Specialist advice in relation to the application of the information presented in this publication must be sought as necessary to ensure the application is clinically appropriate.

In no event, shall Queensland Health be liable (including negligence) for any claim, action, proceeding, demand, liability, costs, damages, expenses or loss (including without limitation, direct, indirect, punitive, special or consequential) whatsoever brought against it or made upon it or incurred by Queensland Health arising out of or in connection with a person's use of information in this publication



Requisite training, knowledge, skills and experience

Training

- Completion of CTI D-WTS01 When to stop.
- Mandatory training requirements relevant to Queensland Health/Hospital and Health Service (HHS) clinical roles are assumed knowledge for this CTI.
- Completion of the following Queensland Health allied health assistant training modules (or corresponding units of competency in HLT43015 Certificate IV in Allied Health Assistance) or equivalent work-based learning:

- Assist with physiotherapy treatments and interventions.

Access the module/s at: <https://www.health.qld.gov.au/ahwac/html/ahassist-modules>

Clinical knowledge

- The following content knowledge is required by an AHA delivering this task:
 - the purpose of the 10 metre walk test including the standard testing process, scoring and documentation requirements.
 - the basic elements of walking and common limitations to walking with specific focus on those relevant to the client population in the local service e.g. veering, tripping, shuffling, antalgic gait pattern, freezing, etc.
- The knowledge requirements will be met by the following activities:
 - completing the training program/s (listed above).
 - reviewing the Learning resource.
 - receiving instruction from an allied health professional in the training phase.

Skills or experience

- The following skills or experience are not identified in the task procedure but support the safe and effective performance of the task and are required by an AHA delivering this task:
 - competence in facilitating client's use of walking aids relevant to the clinical area e.g. four-wheeled walker, hopper frame, walking stick.
 - experience and confidence in facilitating client movement and positioning.

Safety & quality

Client

- The AHA will apply CTI D-WTS01 When to stop at all times.
- In addition, the following potential risks and precautions have been identified for this clinical task and should be monitored carefully by the AHA during the task:
 - as this test is routinely used as an outcome measure for clients who have balance problems and are at risk of falls, standby assistance of the client is required at all times.

Equipment, aids and appliances

- Appropriate footwear should be worn during the task i.e. enclosed, well-fitting shoes with good traction.

Environment

- Ensure the test area is free of trip hazards and obstacles with minimal distractions e.g. environment free of pedestrian traffic.

Performance of clinical task

1. Delegation instructions

- Receive the delegated task from the health professional.
- The delegating allied health professional should clearly identify parameters for delivering the clinical task to the specific client, including any variance from the usual task procedure and expected outcomes. This may include:
 - the client's usual walking ability including the use and type walking aid and assistance required e.g. standby assistance, need for cueing.
 - any deficits or restrictions to walking including weight bearing, use of orthoses or braces, or problems with proprioception, vision, behaviour or communication.
 - additional monitoring requirements, including expected limits e.g. blood pressure, pain.
 - if the test is a flying start or standing start, to be performed at the preferred walking speed or fastest speed possible, or both.
 - any required variations to the standard testing conditions e.g. need to count steps.

2. Preparation

- A clear, flat path of 14 metres length, measured and marked at 0, 2, 12 and 14 metres. This identifies the acceleration and deceleration zones.
- Collect a stopwatch.

3. Introduce task and seek consent

- The AHA introduces him/herself to the client.
- The AHA checks three forms of client identification: full name, date of birth, **plus one** of the following: hospital unit record (UR) number, Medicare number, or address.
- The AHA describes the task to the client. For example:
 - “The 10 metre walk test measures your walking speed over ten metres. We will test you walking at your comfortable pace and/or as fast as you can”.
- The AHA seeks informed consent according to the Queensland Health Guide to Informed Decision-making in Health Care, 2nd edition (2017).

4. Positioning

- The client's position during the task should be:
 - standing, and if part of the delegation instruction, with a walking aid.
- The AHA's position during the task should be:
 - standing beside the client, generally behind or on the affected side.

5. Task procedure

- There is variation in the testing protocols reported in the literature in terms of pacing, instructions and distance (Palmer, 2015). A commonly used procedure is described in this CTI. If an alternative protocol is used locally, this should be noted in the Performance Criteria Checklist.
- Explain and demonstrate (where applicable) the task to the client.
- Check the client has understood the task and provide an opportunity to ask questions.
- The task comprises the following steps.
 1. Position the client in standing at the starting marker of 0 metres.
 2. Instruct the client that they are to walk safely at the required (comfortable or fast) speed and stop when they reach the far marker (indicate the 14 metre marker). Timing will commence at the 2 metre marker and stop at the 12 metre marker. The test will occur twice for the required speed/s.
 3. Confirm the client is ready and ask them to start walking by saying the word "GO".
 4. Start the timer when the client's leading foot toes pass the 2 metre marker and stop the timer when any part of the leading foot crosses the 12 metre marker i.e. timer will measure duration of 10 metres walked. If part of the delegation instruction, count the number of steps whilst timing.
 5. To perform the test for the second time at the required speed, repeat steps 2 to 4. Note: if the client is to perform the test at both comfortable and fast speeds, the test will be performed four times i.e. twice at each speed.
 6. Calculate the speed in metres/second. See Learning resource.
- During the task:
 - provide feedback and correct errors in the performance of the task including:
 - to reduce the likelihood of setting the pace for the client's walking speed, provide support behind or to the side of the client. If assistance is provided for safety, this should be included as part of feedback to the delegating health professional and the level of support documented, reflecting the greatest level required during the test.
 - clients may focus on the 2 and 12 metre markers during the test. The client is given this space to accelerate to the preferred/fastest speed and decelerate. These distances are not included when determining speed. Encourage the client to walk at the required speed past the markers to improve testing accuracy.
 - monitor for adverse reactions and implement appropriate mitigation strategies as outlined in the "Safety and quality" section above including CTI D-WTS01 When to stop.
- At the conclusion of the task:
 - encourage feedback from the client on the task.
 - provide summary feedback to client, emphasising positive aspects of performance e.g. time recorded.
 - ensure the client is comfortable and safe.

6. Document

- Document the outcomes of the task in the clinical record, consistent with relevant documentation standards and local procedures. Include observation of client performance, expected outcomes that were and were not achieved, and difficulties encountered, or symptoms reported by the client during the task.
- For this task the following specific information should be presented:
 - walking ability: independent or with supports e.g. walking aid (including type of aid), verbal cueing.
 - speed/s of test performed: comfortable and/or fast.
 - timer recording for each test and if part of the delegation instruction, the number of steps.
 - the average speed calculated in metres/seconds for each test.
 - any observation of walking performance including if assistance was provided for safety and amount, or gait pattern e.g. shuffling, limping or uneven strides.

7. Report to the delegating health professional

- Provide comprehensive feedback to the health professional who delegated the task.

References and supporting documents

- Palmer EP (2015). Clinical Review 10-Meter Walk Test. Cinahl Information Systems. Available at: https://www.ebscohost.com/assets-sample-content/10-Meter_Walk_Test_CR.pdf
- Queensland Health (2018). Clinical Task Instruction D-WTS01 When to stop. Available at: <https://www.health.qld.gov.au/ahwac/html/clintaskinstructions.asp>
- Queensland Health (2017). Guide to Informed Decision-making in Health Care (2nd edition). Available at: https://www.health.qld.gov.au/_data/assets/pdf_file/0019/143074/ic-guide.pdf

Assessment: performance criteria checklist

D-MT06: 10 metre Walk Test (10mWT)

Name:

Position:

Work Unit:

Performance criteria	Knowledge acquired	Supervised task practice	Competency assessment
	Date and initials of supervising AHP	Date and initials of supervising AHP	Date and initials of supervising AHP
Demonstrates knowledge of fundamental concepts required to undertake the task.			
Obtains all required information from the delegating health professional, and seeks clarification if required, prior to accepting and proceeding with the delegated task.			
Completes preparation for the task including the correct positioning of markers and collection of a stopwatch.			
Introduces self to the client and checks client identification.			
Describes the purpose of the delegated task and seeks informed consent.			
Positions self and client appropriately to complete the task and ensure safety.			
Delivers the task effectively and safely as per delegated instructions and CTI procedure. a) Clearly explains the task using the local agreed protocol, checking the client's understanding. b) Positions the client at the starting marker of 0 metres. c) Instructs the client in the test requirements. d) Confirms the client is ready and ask them to start walking by saying the word "GO". e) Starts the timer when the client's toes pass the 2 metre marker and stops the timer when any part of the leading foot crosses the 12 metre marker. If part of the delegation instruction, counts the number of steps whilst timing. f) Performs the test twice for the required speed/s. g) Accurately calculates the speed in metres/second. h) During the task, maintains a safe clinical environment and manages risks appropriately. i) Provides feedback to the client on performance during and at completion of the task.			
Documents the outcomes of the task in the clinical record, consistent with relevant documentation standards and local procedures.			
Provides accurate and comprehensive feedback to the delegating health professional.			

Comments on the local service model:

The AHA has been trained and assessed as competent to deliver the following 10mWT test protocol (list reference to testing protocol of variations from CTI task procedure): For example
 SCIRE Professional (2020). 10 Metre Walking test (10MWT). Available at: <http://scireproject.com/outcome-measures/outcome-measure-tool/10-meter-walking-test-10-mwt/>

Comments:

Record of assessment competence:

Assessor name:	Assessor position:	Competence achieved: / /
----------------	--------------------	--------------------------

Scheduled review:

Review date: / /

10 metre Walk Test (10mWT): Learning resource

Required reading

- University of Toronto (2018). iWalk. A guide to an evidence-informed approach to using the 10-metre and 6-minute walk test post-stroke. Performing the 10-metre walk test at a comfortable pace (p11-18). Available at: <http://www.iwalkassess.com/iWalk-Guide.pdf>
- Physiopedia (2020). Gait. Available at: <http://www.physio-pedia.com/Gait>

Optional reading and viewing

- If the task is to be performed with client's post-stroke using the iWalkAssess app
 - Read the iWalk guide. Module 2: Performing the Tests. 10 metre Walk Test (Comfortable Pace) Protocol p 13-18.
 - View educational content and demonstration of the test.
 Available at: <http://www.iwalkassess.com/>

Calculating an average walking speed

- The average walking speed for the 10-metre walk test is calculated by dividing the distance travelled by the average time.
- The distance travelled is 10 metres (m).
- The average time is calculated by combining the two recorded values in seconds (s) and dividing by two.

$$\text{For example: } \frac{12 \text{ s} + 13 \text{ s}}{2} = 12.5 \text{ s}$$

$$\text{Average walking speed} = \frac{\text{total distance travelled (m)}}{\text{Average time (s)}}$$

$$\text{Average walking speed} = \frac{10 \text{ m}}{12.5 \text{ s}}$$

$$\text{Average walking speed} = 0.8 \text{ m/s}$$

Example 10mWT documentation

- Timed 10mWT (comfortable speed) with a four-wheeled walker and standby assistance: 12.5 seconds, 24 steps. Velocity = 0.8m/s.

Example recording form (Queensland Health only)

- Queensland Government: Metro North Hospital and Health Service (2018). Physiotherapy Functional Mobility and Gait Assessment MRA 5141. Available at: https://qheps.health.qld.gov.au/_data/assets/pdf_file/0027/2240973/mr_a_5141.pdf