**Core Measure: Six Minute Walk Test (6MWT)**

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| **Overview** | * This measure examines walking endurance. Participants will walk around the perimeter of a set circuit for a total of six minutes.
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| **Number of Test Items** | * 1
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| **Scoring** | * Distance in meters that a patient covers in 6 minutes
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| **Equipment** | * 12 meter long hallway or open area (e.g., quiet gym)
* Markings to indicate turnaround (e.g.: cones)
* Stopwatch
* Mechanical lap counter or pencil and paper
* Measuring instrument (meters)
* Chair
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| **Time (new clinician)****Time (experienced clinician)** | * < 10 minutes
* < 10 minutes
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| **Cost** | * Free
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| **Logistics-Setup** | * In a hallway at least 12 meters long or open area
* There should be a clear pathway on the sides and at either end.
* A turnaround point approximately 124 cm wide with clear markings should be set up at both ends
* A chair should be placed at one end
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| **Logistics-Administration** | * Prior to administering the measure, the patient should be sitting in a chair, rested, near the starting point of the test.
* Please review any contraindications and take resting heart rate.
* Instructions to the patient in sitting (Quinn, 2013):
	+ *“The aim of this test is to walk as far as possible in six minutes. You will walk back and forth in the hallway. Six minutes is a long time to walk, so you will be exerting yourself. You may get out of breath or become tired. You are allowed to slow down, to stop, and to rest as necessary. You may lean against the wall while resting, but resume walking as soon as you are able. Are you ready to do that?”*
	+ *“I am going to use this counter to keep track of the laps you complete. Remember the aim is to walk as far as possible, but do not run or jog.”*
	+ Ask the participant to stand and take resting dyspnea rating using modified Borg Scale.
	+ “Start now or when you are ready.”
	+ Additional encouragement should be given in a standardized format every minute:
		- At 1 minute: *"You are doing well, you have 5 minutes to go"*
		- At 2 minutes: *"Keep up the good work, you have 4 minutes to go"*
		- At 3 Minutes: *"You are doing well, you are halfway done"*
		- At 4 minutes: *"Keep up the good work, you have only 2 minutes left"*
		- At 5 minutes: *"You are doing well, you only have 1 minute to go"*
		- With 15 seconds to go: *“In a moment I’m going to tell you to stop. When I do, just stop right where you are and I will come to you.”*
		- At 6 minutes: *“Stop”*
	+ Encourangement in any other way should be avoided
* The patient may take as many standing rests as they like, but the timer should keep going and record the number of rests that they take and the total rest time.
* Patients may use any assistive device or bracing that they are currently using. Clinicians should make a note of what the patient is using.
* When administering walking items, do not walk in front of or directly beside the patient, as this “paces” the patient and can influence the speed they walk. Instead, walk at least a half step behind the patient.
* Individuals walk without the physical assistance of another person.
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| **Logistics-Scoring** | * Distance (in meters) covered in six minutes calculated by multiplying the number of total laps by 12 meters and adding the distance of the partial lap completed at the time the test ended.
* If the patient needs to stop and sit prior to the end of the six minutes, the test ends, and the distance they ambulated is recorded.
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| **Additional Recommendations** | * The distance (meters) may be recorded at 1 and 3 minutes as well.
* Vital signs, including, but not limited to heart rate and dyspnea (assessed using the modified Borg Scale) should be assessed before and after the walk.
* Patients should not talk during the test, as this depletes their respiratory reserves. Exceptions to this are if the patient requests to stop the test or needs to report any symptoms (e.g. pain, dizziness).
* The person administering the test also should not talk, except to provide updates every minute (as described above). Talking during the test can distract the patient and affect their score on the test.
* To track change, it is recommended that this measure is administered a minimum of two times (admission and discharge), and when feasible, between these periods, under the same test conditions for the patient.
* For patients who are unable to walk, a score of 0 meters should be documented.
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**Common Questions and Variations**

1. *“My current setting does not have a 12 meter hallway or open area available, what should I do?”*
	1. Length of the track does matter. According to one study, using shorter hallways or “tracks” resulted in patients walking shorter overall distances on the 6MWT compared to when they used longer hallways (Scivoletto, 2011). Therefore, it is recommended that the test be administered consistent with recommendations above.
	2. *If your facility does not have a 12 meter hallway*, the test can be administered outside over level ground free of street crossings. One study investigated an outdoor test using a GPS compared to a measuring wheel and found similar results between the two (Wevers, 2011).
	3. *If your facility does not have a 12 meter hallway, AND you can’t administer the test outside* due to safety, weather, unlevel surfaces, etc., expert opinion is that you should still administer the test over a shorter track, provided that you are consistent every time you administer it, and that you document the shorter track distance. Be aware that the results may not be comparable to published normative values.
2. *“My patient requires contact guard assist, can I still administer this measure?”*
	1. This test should be administered without any physical assistance. It is recommended that you attempt to administer with close supervision assist, instead, but only if safe to do so.
	2. However, if it is unsafe to administer with close supervision, the patient should be given a score of 0 meters.
3. *“My patient stumbled during the measure and I jumped in to catch them so that they didn’t fall. How do I score this measure?”*
	1. Providing assistance during the test is a deviation from the standardized procedure, however may be necessary to preven patient injury. If physical assistance was provided, the patient should be given a score of 0.
4. *“My patients are not cognitively intact, and get distracted during the test, frequently forgetting what their goal is. Can I still administer this measure?”*
	1. Yes. Examiners can use brief verbal, visual, or tactile cues to keep patients on-task and to remind them of the goal, but be consistent (e.g., “Keep going. Remember your goal is to walk as far as you can in 6 minutes.”). Document the type and frequency of the required cues.
5. *“My patient can’t walk for 6 consecutive minutes. Why can’t I just do the 2 Minute Walk, instead?”*
	1. The good news is that any patient who can walk without physical assistance can perform the 6MWT.  Even if your patient has to end the test well before the 6 minutes are over, they can still receive a score on this test. In some cases the score might be just a few feet distance.
	2. In fact, patients who cannot walk without assistance, but who have goals for ambulation, can receive a score of 0 on this test (meaning that they can walk 0 feet in six minutes while following the 6MWT protocol).  This is a very useful score, and can allow potentially dramatic improvement to be documented over time.
	3. In order to decrease variability in practice and for consistency of measurement across episodes of care and the continuum of care, the 6 Minute Walk Test is the preferred measure of walking endurance.  It is recommended that clinicians use this measure instead of (or in addition to) other measures of walking endurance.
6. *“My patient requires an assistive device. Can I still administer this measure?”*
	1. Yes. Whenever possible, use of an assistive device should remain consistent, in order to compare performance over time.  Document the device used.
	2. It is likely, however that the type of assistive device may change over time. This is okay, just be sure to document which type of device is used. Typically the less restrictive a device is, the faster the patient will go.
7. *“My patient has an ankle foot orthosis but rarely wears it at home. Do I test him with or without it.”*
	1. The decision is ultimately up to the clinician, but the condition chosen needs to be documented. Expert opinion would recommend using what the patient is most likely to use in their own environment. The same condition should be used for the retest.  If the patient no longer needs the orthosis which was used in the initial test, it would be appropriate to repeat the test without the orthosis and document this fact.

**References**

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