

## Testing protocol for 6MWT<sup>(1)</sup>

### Course

The 6MWT should be performed along a flat, straight course with a hard surface with little pedestrian traffic. It is recommended that the walking course be 30 m or more in length, to be consistent with the courses on which reference equations have been generated<sup>(2)</sup>. The ends of the course should be marked such that they are easily visible to patients.

### Conduct

The patient should be encouraged every 60 s using the standard phrases (table 1). Other words of encouragement and other nonverbal prompts should not be used. If the patient stops walking during the test, the timer must not be stopped. The patient should be allowed to rest while sitting or standing, as they prefer. While the patient is stopped, standardised encouragement should be provided every 30 s (table 1). The time that the patient stopped and the time that walking is recommenced should be recorded.

<b>1 min</b>	You are doing well. You have 5 minutes to go.
<b>2 min</b>	Keep up the good work. You have 4 minutes to go.
<b>3 min</b>	You are doing well. You are halfway.
<b>4 min</b>	Keep up the good work. You have only 2 minutes left.
<b>5 min</b>	You are doing well. You have only 1 minute to go.
<b>6 min</b>	Please stop where you are.
<b>If the patient stops during the test, every 30 s once <math>S_{pO_2}</math> is <math>\geq 85\%</math></b>	Please resume walking whenever you feel able.

Table 1: Standardised encouragement for the 6-min walk test.  $SpO_2$ : arterial oxygen saturation measured by pulse oximetry.

### Recording performance of the 6MWT

The primary outcome to be reported is 6MWD. The number of laps and any additional distance covered (the number of metres or feet in the final partial lap) should be recorded. The total distance walked is calculated, rounding to the nearest metre or foot. If the patient stopped during the test, the total time stopped, the number of stops and the average walking speed over the 6 min are also reported<sup>(3)</sup>. In patients who cannot walk for 6 min, this may provide alternative metrics for detecting change over time<sup>(3)</sup> and may facilitate exercise prescription<sup>(4)</sup>. It is optional to report the 6MWD as a percentage of predicted. If the % predicted 6MWD is reported, the reference equations used should be stated. Lowest  $S_{pO_2}$ , end-test HR and symptom scores obtained before and after the test should also be reported.

## References

1. Holland AE, Spruit MA, Troosters T, Puhan MA, Pepin V, Saey D, et al. An official European Respiratory Society/American Thoracic Society technical standard: field walking tests in chronic respiratory disease. *Eur Respir J*. 2014;44(6):1428-46.
2. Singh SJ, Puhan MA, Andrianopoulos V, Hernandez NA, Mitchell KE, Hill CJ, et al. An official systematic review of the European Respiratory Society/American Thoracic Society: measurement properties of field walking tests in chronic respiratory disease. *Eur Respir J*. 2014;44(6):1447-78.
3. Hallstrand TS, Boitano LJ, Johnson WC, Spada CA, Hayes JG, Raghu G. The timed walk test as a measure of severity and survival in idiopathic pulmonary fibrosis. *Eur Respir J*. 2005;25(1):96-103.
4. Spruit MA, Singh SJ, Garvey C, ZuWallack R, Nici L, Rochester C, et al. An official American Thoracic Society/European Respiratory Society statement: key concepts and advances in pulmonary rehabilitation. *Am J Respir Crit Care Med*. 2013;188(8):e13-64.