



## INSTRUCTIONS FOR SIX MINUTE WALK TEST FORM SMW, VERSION 1.0 (QxQ)

### I. GENERAL INSTRUCTIONS

The Six Minute Walk Test Form is filled out by the study clinician conducting the test. Using a paper copy of the form to record the data while the test is in progress is recommended.

The Six Minute Walk, an assessment of lung function is the Flexible Block A procedure. Usually the walk should follow shortly after spirometry since it is performed after bronchodilation (for participants with COPD and/or asthma).

The testing area must be a 30m (100 ft.) segment of straight, unimpeded hallway.

Prepare the area by applying markers for the endpoints and 3m intervals to the baseboard on one side of the hall, with special attention to avoid doorways, etc.

Use the provided 30m metric tape measure. If a pre-existing 100 ft. (30.48m) course with 10ft. markers has been previously laid out, it may be used.

If available, place the traffic cones at the center of the proximal and distal turn points. Place the turn signs at the proximal and distal turn points of the course.

Have ready the following materials: *stopwatch/timer, worksheet for counting laps, oximeter, Borg breathlessness and exertion scales, a chair that can be easily moved along the walking course, emergency equipment (according to local policy): telephone, sphygmomanometer, oxygen source.*

**A “warm-up” period before the test should not be performed. Participants should use their usual walking aids during the test (cane, walker, etc.) and be dressed in comfortable clothing and walking shoes.**

*In general, it is preferable to use room air. If the participant is on long-term oxygen therapy with a resting saturation off oxygen of less than 88%, supplemental oxygen may be used during the test. Future yearly tests should be done at the same amount of supplemental oxygen if possible.*

*The University of Utah will use 1.5L/min by continuous nasal canula for all subjects to simulate sea level inspired pO<sub>2</sub> unless the participant is receiving a high flow rate of long-term oxygen therapy **and** desaturates to less than 88% on 1.5L/min at rest (see above). All other sites should use room air as noted above.*

*See the SPIROMICS MOP 2, Section 2.14 for further details on oxygen use.*

*Prior to the test, the participant should sit in a chair, located near the starting position for at least 10 minutes before assessing pulse and SpO<sub>2</sub> (and Blood Pressure if not taken and recorded within 4 hours prior to test).*

**If systolic BP is > 200mmHg or < 60mmHg, or diastolic blood pressure > 110mmHg discontinue the test.**

**If resting heart rate is > 120 or < 50 beats per minute discontinue the test.**

**If resting SpO<sub>2</sub> is < 88% the participant is not eligible to continue the test** (exception noted above for participants on long-term oxygen therapy).

**Reasons for immediately stopping the test include:**

- if SpO<sub>2</sub> falls below 80%
- the participant asks to stop the test
- if the participant experiences chest pain
- intolerable dyspnea
- leg cramps
- staggering
- diaphoresis
- pale or ashen appearance

## **II. DETAILED INSTRUCTIONS FOR CHALLENGE**

Explain the use of the modified Borg scale (0-10) for assessing breathlessness.

Explain the use of the Borg rating of perceived exertion scale (6-20) for rating perceived exertion.

Read the following instructions to the participant:

*“The object of this test is to walk as far as possible for 6 minutes. You will walk back and forth in this hallway. Six minutes is a long time to walk, so you will be exerting yourself. You will probably get out of breath or become exhausted. You are permitted 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. You will be walking back and forth around the cones. You should pivot briskly around the cones and continue back the other way without hesitation. Now I’m going to show you. Please watch the way I turn without hesitation.”*

Demonstrate by walking one lap yourself. Walk and pivot around a cone briskly.

Record completed and partial laps on the lap count worksheet.

Say to the participant:

*“Are you ready to do that? I am going to use this counter to keep track of the number of laps you complete. I will click it each time you turn around at this starting line. Remember that the object is to walk AS FAR AS POSSIBLE for 6 minutes, but don’t run or jog. Start now, or whenever you are ready.”*

Standardized Encouragement read in a steady voice:

After the 1<sup>st</sup> minute: *“You are doing well. You have 5 minutes to go.”*

When the timer shows 4 minutes remaining: *“Keep up the good work. You have 4 minutes to go.”*

When the timer shows 3 minutes remaining: *“You are doing well. You are halfway done.”*

When the timer shows 2 minutes remaining: *“Keep up the good work. You have only 2 minutes left.”*

When the timer shows 1 minute remaining: *“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”*

If the participant stops at any time prior, you can say: *“You can lean against the wall if you would like; then continue walking whenever you feel able.”*

**Do not use other words of encouragement (or body language) to influence the patient’s walking speed.** Accompany the participant along the walking course, but keep just behind them. Do not lead them.

**If available record the distance at which the oxygen saturation drops < 88%.**

### III GENERAL INSTRUCTIONS FOR THE FORM

**Header Information:** The header information consists of key fields which uniquely identify each recorded instance of a form.

**FORM DATE:** Record date this is being completed. Select the date from the pop up calendar or type in the date in the space provided. Dates should be entered in the mm/dd/yyyy format.

**INITIALS:** Record the staff code of the person entering the data on this form. This code is assigned to each person at each site by the GIC. If you do not have a staff code and are collecting SPIROMICS data please contact the GIC in order to receive your own individual staff code.

### III. DETAILED INSTRUCTIONS FOR EACH ITEM

Item 1. Medications taken since post-bronchodilator spirometry: Record 'Y' for Yes or 'N' for No. If No, go to Item 2. If Yes, complete 1a-c.

Item1a-c. Record medication name, dose and time taken for up to 3 medications. Record time in hours and minutes. Choose AM or PM.

Item 2. Blood pressure more than 4 hours prior to 6MW: Record 'Y' for Yes or 'N' for No. If No, go to Item 3. If Yes, complete Item2a-b.

Item2a. Record systolic pressure

Item2b. Record diastolic pressure

Item 3. Supplemental Oxygen during test : Record 'Y' for Yes or 'N' for No. If No, go to Item 4. If Yes, complete Item 3a-b.

Item3a. Oxygen Flow rate: Record in Liters per minute.

Item3b. Oxygen type: Record 1 for continuous flow nasal canula or 2 for Pulsed delivery system (conserver).

Item4a. SpO2 at rest prior to 6MW: Record as percentage.

Item4b. Pulse: Record beats per minute.

Item 5. Continuous oximetry recorded: Record 'Y' for Yes, or 'N' for No.

Item 6. Start of 6-minute walk: Record time in hours and minutes. Choose AM or PM.

Item 7. Immediately following 6MW: Record the following:

Item7a. SpO2: Record as percentage.

Item7b. Pulse: Record beats per minute.

Item7c. Breathlessness: Record participant's response from 0-10 on the Modified Borg Scale (0=no breathlessness, nothing at all, 0.5=very, very slight, 1=very slight, 2=slight breathlessness, 3=moderate, 4=somewhat severe, 5=severe breathlessness,6=is between

*severe breathlessness and very severe breathlessness, 7=very severe breathlessness, 8=between very severe breathlessness and very,very severe breathlessness, 9=very, very severe breathlessness, 10=maximum breathlessness.)*

Item7d. Exertion: Record participant's response from 6-20 on the Borg Scale of Perceived Exertion (*6=none, 7-8=very,very light, 9-10=very light, 11-12=fairly light, 13-14=somewhat hard, 15-16=hard, 17-18=very hard, 19-20=very,very hard.*

Item 8a. Type of course used: Select the type of course used. Record 1 for 30 meters x 2 lengths, 2 for 100 feet x 2 lengths, or 3 for other. If Other, specify in the space provided.

Item 8b. Record the number of completed laps

Item 8c. Record the distance walked the final partial lap in meters if 8a is in meters or in feet if 8b is in feet.

Item 9. Stopped before 6 minutes: Record Y for Yes or N for No. If No skip out of form. If Yes answer 9a and 10.

Item9a. Duration: Record in minutes and seconds.

Item 10. Reason for stopping: Record one response 1-5. (*1=desaturation <80%, 2=foot, knee, hip or other orthopedic pain, 3=muscle fatigue or pain, 4=breathlessness, 5=adverse event*)

Item105. If response to Item 10=5, select all that apply. (*a=angina, b=lightheadedness, c=intolerable dyspnea, d=leg cramps, e=staggering, f=diaphoresis, g=pale or ashen appearance, h=mental confusion or headache, i=other*). If other is selected, please explain.