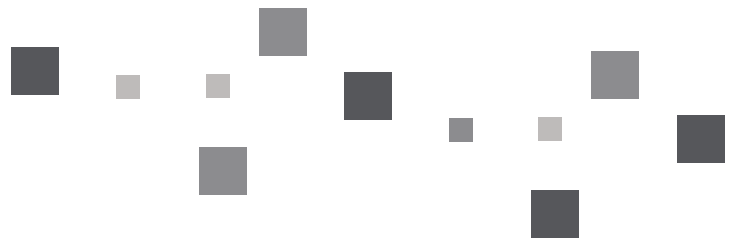


# Using the 6MWT App





## Background

The 6MWT is probably the most commonly used test of submaximal (and sometimes maximal) endurance in cardiopulmonary rehabilitation. It is easy to administer, better tolerated, and more reflective of activities of daily living than other walk tests. It requires little equipment and can be performed by most clinical populations. It is a measure of how far a person can walk on level ground in six minutes, walking as fast as they can.

## Required Additional Equipment

### *For the test:*

- Tape measure
- Two small cones to mark the turnaround points
- One chair that is easily moved along the walking course
- Wrist mounted Nonin 3150 Pulse Oximeter
- Blood Pressure monitoring unit

### *For safety:*

- Telephone and emergency plan in place
- A source of oxygen
- A crash cart with automated external defibrillator

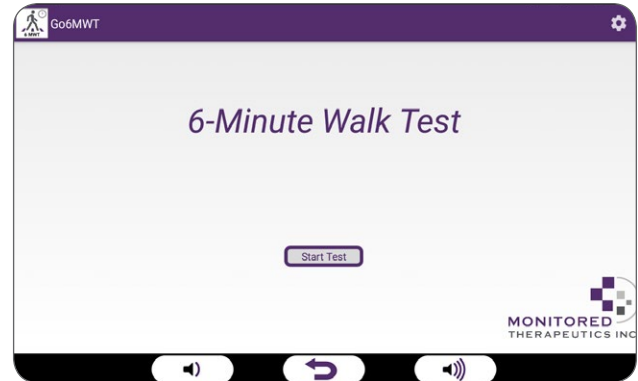
## Set-Up


1. Place one cone in a long and wide hallway. Measure out 30 meters (approximately 100 feet) from the first cone and place the second cone.
2. Have the patient sit in a chair and place the pulse oximeter on the patient's wrist and locate the sensor on the patient's middle finger and turn it on.
3. Place the blood pressure cuff preferably on the left arm.

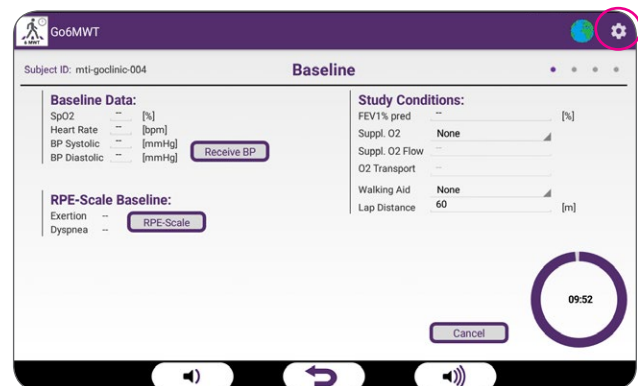



## Pre-Test Set-Up

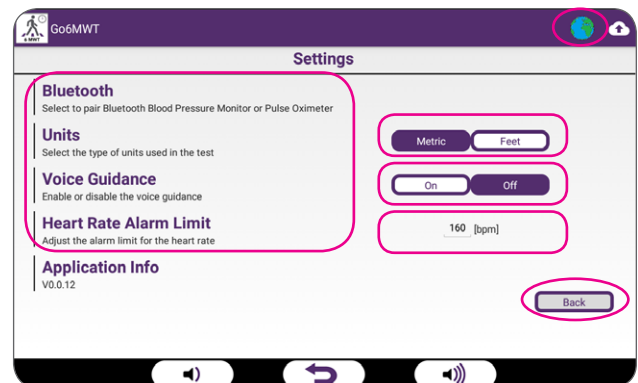
1. Select the 6MWT App. Press **START TEST** button.



2. From the **Baseline** screen select **SETTINGS**  icon from the top right corner of the screen.



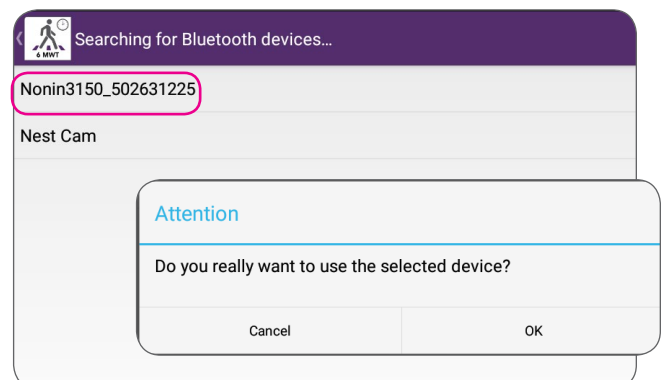
3. On the **Settings** screen, press **Units** to select the units of measure for your tape measure
4. Select Voice Guidance "ON" on if audible instructions are desired.
5. If the patient requires language specific instructions, select the **GLOBE**  icon at the top right-hand corner of the screen to select the patient's native language.
6. Enter the maximum heart rate alarm setting
7. If the pulse oximeter device has not been paired with the 6MWT App:



Ensure the Nonin 3150 turned on. Select **Bluetooth** option on the screen. Then select **Pulse Oximeter**.

The available Bluetooth devices will be listed. Select the Nonin 3150. A confirmation screen will appear. Press **OK** to accept.

8. Press **BACK** button to return to the **Baseline** screen.
9. The current heart rate (HR) and oxygen saturation (SpO2) will now show on the screen.

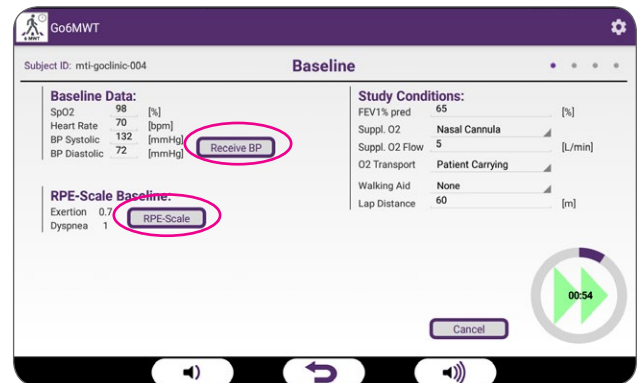




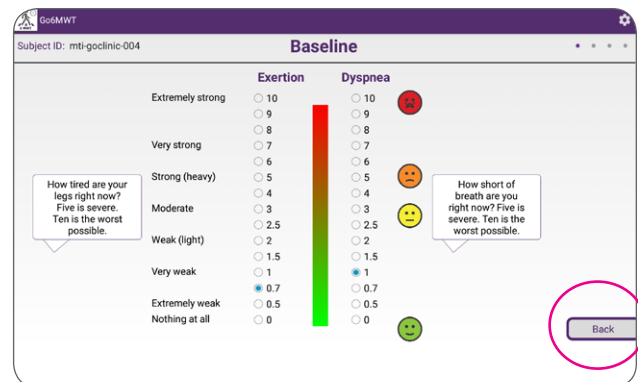
## Pre-Test Steps

- Blood Pressure Measurement:**  
Initiate a measurement of blood pressure on the *BP Unit* by pressing the **START • STOP** button on the *BP Unit* **TWICE**.
- Then **press RECEIVE BP** button on the *GoClinic* screen to collect and show the BP test data.

**NOTE:** If the *BP Unit* has not been previously paired with the *GoClinic*, a pop-up screen will require pairing once the *BP* measurement has been started.



- RPE Scale:** Press the **RPE SCALE** button and have the patient select their current sense for level of Exertion and level of Dyspnea.
- Press the **BACK** button to return to the **Baseline** screen.

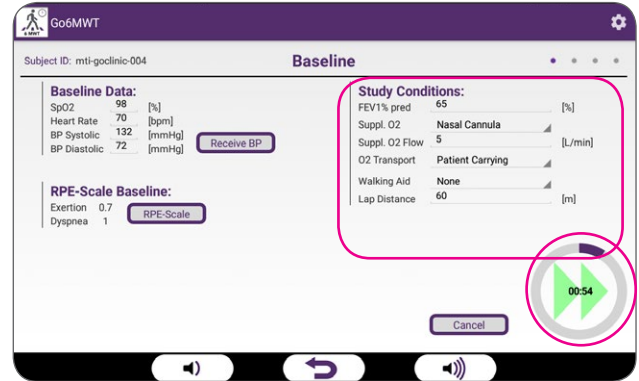




**5. Study Conditions:**

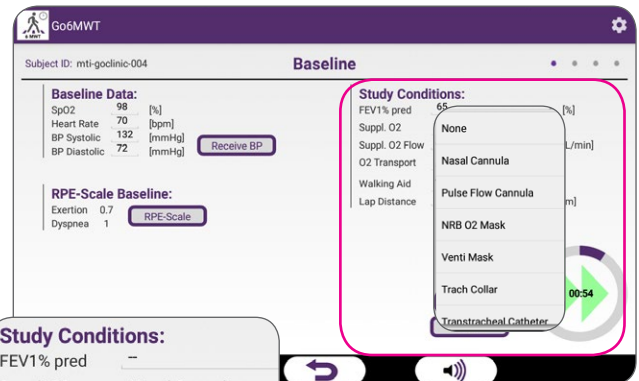
From the **Baseline** screen, enter the Study Conditions including:

- a. FEV1 %Predicted (optional)
- b. If the patient is receiving supplemental oxygen, select the delivery device, flow rate and how the O<sub>2</sub> is being transported during the test.
- c. Walking aids if any.
- d. The lap distance (Twice the distance between the cones).

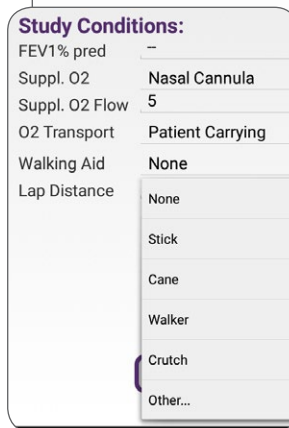


Study Conditions

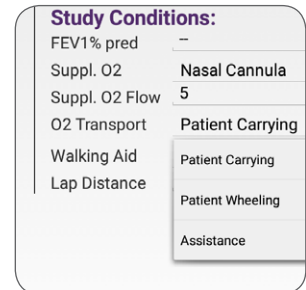
**6.** Once complete, remove the blood pressure cuff and **press the Green** double start arrow to proceed to the **Testing** screen.



Supplemental oxygen

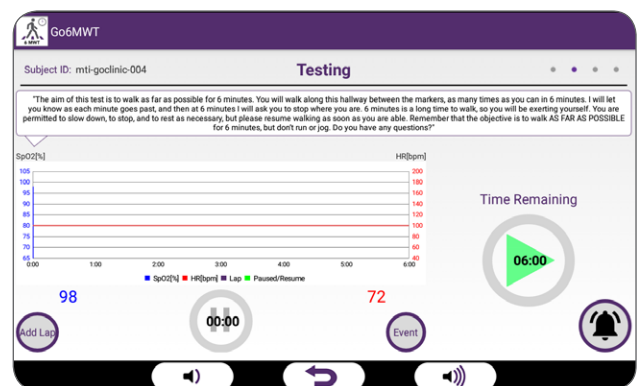


Walking Aids



Oxygen Transport

**7.** Upon entering the **Testing** screen, the instructions to be read to the patient will appear. If Voice Guidance is turned on, the App will speak these words to the patient.



Supplemental oxygen

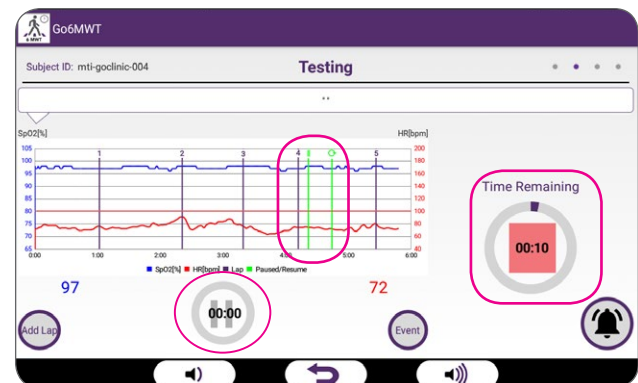
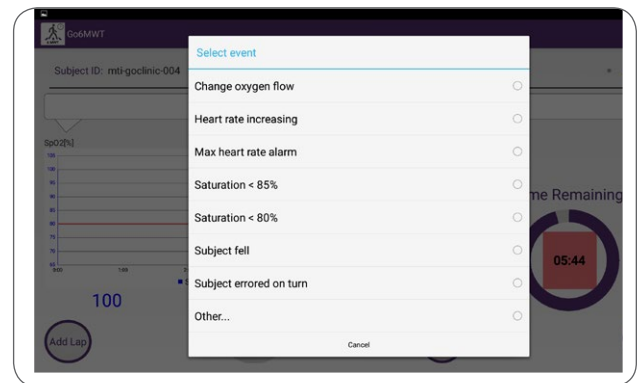
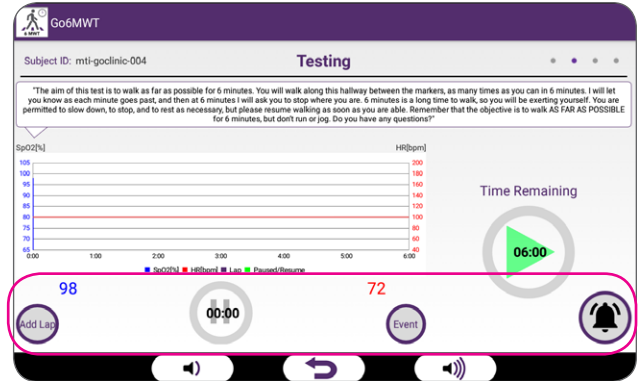


## 6MWT Test Procedure Controls

1. During the test, there are several controls for the User:
  - a. Each time the patient completes a lap (walks to the far cone and back), **press** the **ADD LAP** button. A vertical line will appear on the screen at the time of the lap completion.
  - b. If there is an adverse event, **press** the **EVENT** button and select an event or optionally enter what happened manually.
  - c. If the heart rate exceeds the **Alarm Limit**, an audible alarm will sound. **Press** the **ALARM** button to silence the alarm.
2. If the patient stops walking for any reason, **press** the **PAUSE** button and a green "pause" line will appear. Once the patient starts walking again, **press** the **PAUSE-RESUME** button again. A second green line will appear with the resume symbol above it.

**NOTE: Every 30 seconds during a pause when the saturation is above 85% a message will appear to read to the patient to begin walking again (It will be spoken if Voice Guidance is on).**

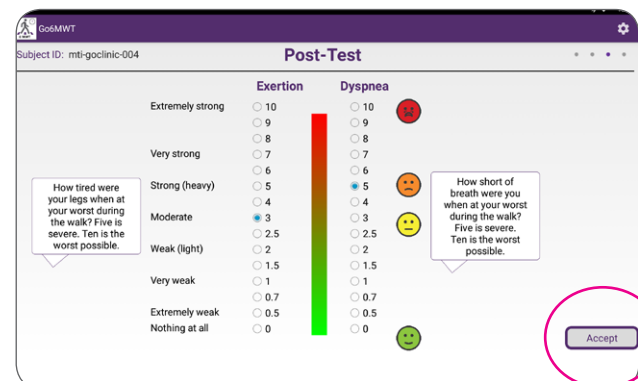
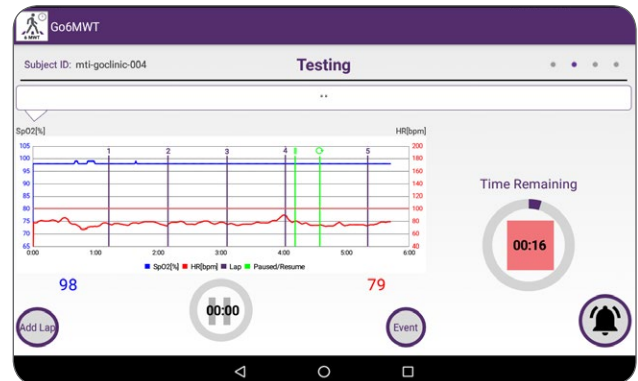
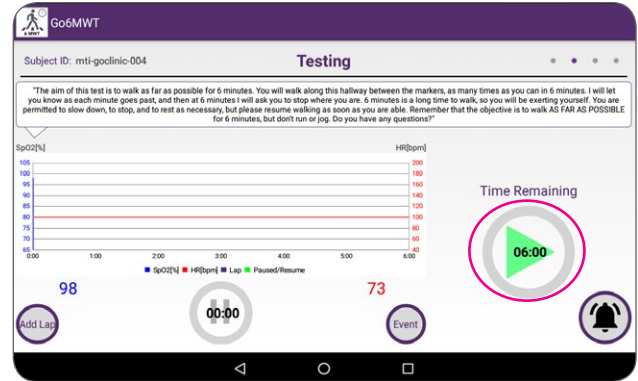
3. A 6-minute count-down timer will count down the time of the test. To end the test prematurely, **press** the red square **STOP** button to exit the test. If at less than 6 minutes, a confirmation will be required.





## 6MWT Test Procedure Controls

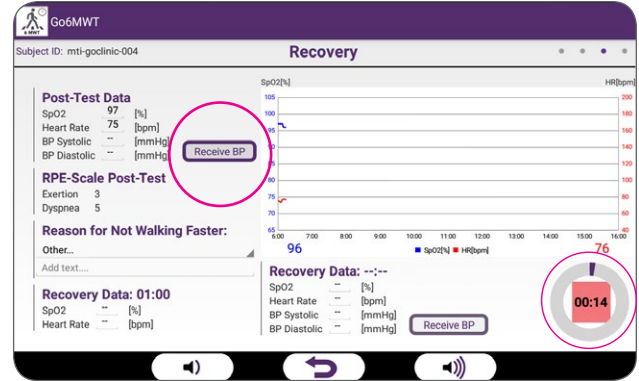
1. Press the **Green Start** arrow when the patient is ready to start walking.
2. As the patient walks for the six minutes, the instantaneous HR and SpO2 will appear on the graph.
3. At the end of six minutes or if the test is ended prematurely, have the patient stop exactly where they are and bring them a chair to sit in.
4. The App will proceed to the **Post-Test RPE** screen. Have the patient select their current sense for level of Exertion and level of Dyspnea. **Press Accept** to proceed to the **Recovery** screen.



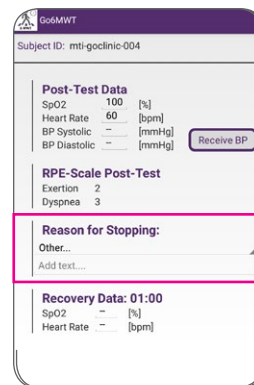


## 6MWT Test Recovery

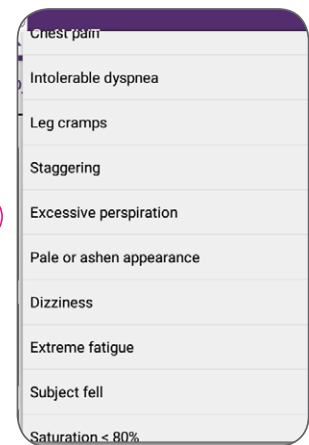
1. Upon entering the **Recovery** screen, the last HR and SpO2 during the test will be displayed.
2. Place the blood pressure cuff on the patient's arm and initiate a measurement. **Press the RECEIVE BP** button on the screen.



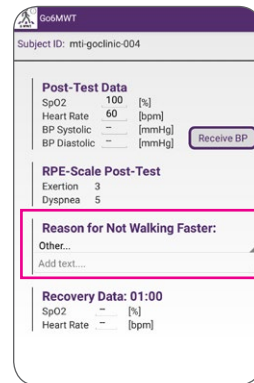
3. If the patient stopped walking before 6 minutes: a **Reason for Stopping** question with a dropdown menu for why the patient stopped will appear.



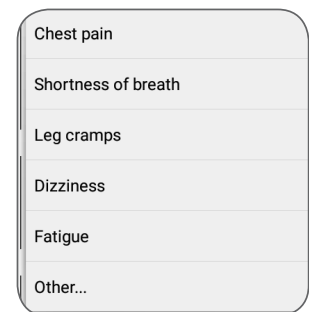
Reason for Stopping



4. If the patient stopped walking at 6 minutes because they were instructed to stop: a **Reason for Not Walking Faster** question with a dropdown menu for why the patient could not walk faster will appear.



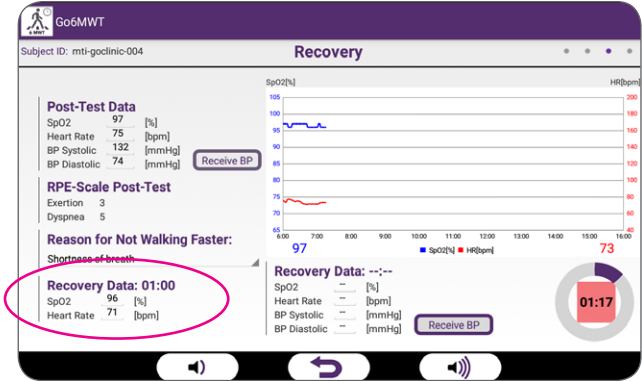
Not Walking Faster







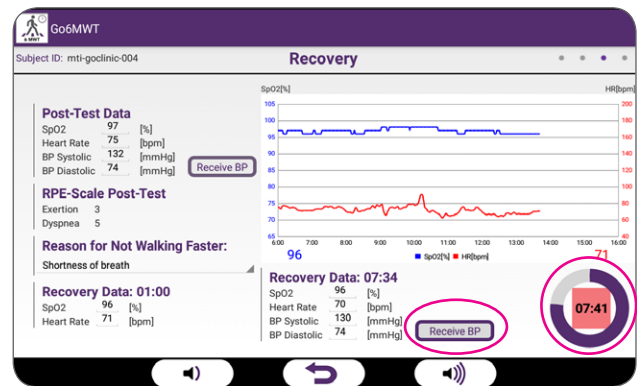
- At 1 minute, the recovery HR and SpO2 will be displayed (**NOTE: 2-min and 3-min data is collected and stored**).



- A 10-minute recovery timer is displayed on the lower right side of the screen. The recovery period can be stopped whenever the patient is considered adequately recovered to walk on their own.

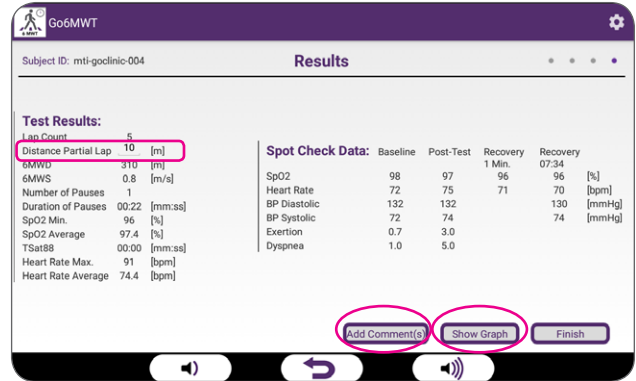
The **Recovery** screen will close after 11 minutes if not terminated earlier.

- Additional recovery blood pressure measurements may be taken at any time by initiating a measurement on the **BP Unit** and then pressing the **RECEIVE BP** button. Current HR and SpO2 will also be recorded.

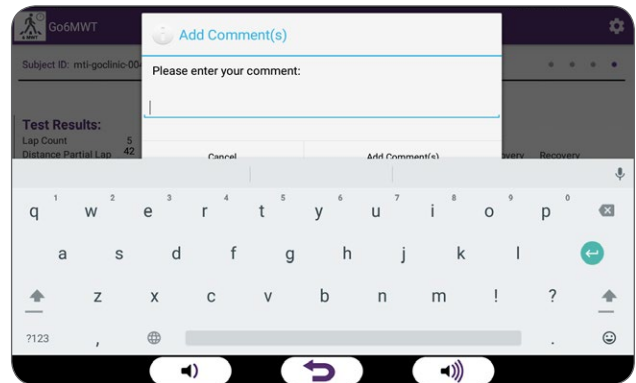




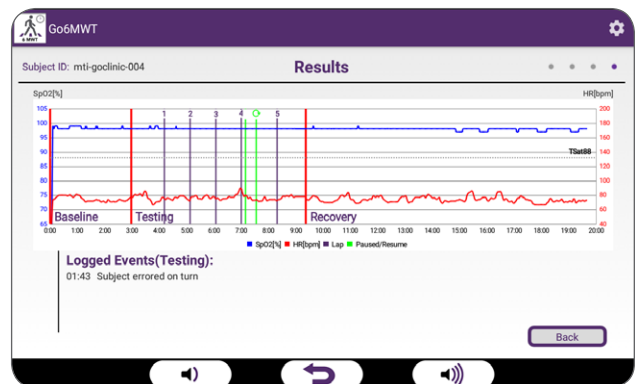
8. Upon exiting the **Recovery** screen, a **Results** screen will be displayed. Measure any distance of a partial lap and manually enter the distance.



9. Additional comments can also be added. Press the **ADD COMMENTS** button and type any additional comments needed.



10. Press the **SHOW GRAPH** button to view a results graph. Press the **BACK** button to return to the **Results** screen.





## Test Results Upload

11. Press the **FINISH** button to upload the test data to the *MTI CarePortal*.
12. A message indicating a successful upload will appear on the **6MWT Start** screen.
13. If an upload was not successful, the *GoClinic* will store the data until communication with the *MTI CarePortal* is re-established and the data will be uploaded with the patient's ID.
14. Press the **BACK** button to return to the *GoClinic Measurements* screen.

