

**OPTN Lung Transplantation Committee  
Six-Minute Walk Workgroup  
Meeting Summary  
June 22, 2023  
Conference Call  
Marie Budev, DO, Chair  
Matthew Hartwig, MD, Vice Chair**

## **Introduction**

The Six-Minute Walk Workgroup (the Workgroup) met via Citrix GoTo teleconference on 6/22/2023 to discuss the following agenda items:

1. Welcome and agenda
2. Review and compare transplant program protocols
3. Discuss next steps
4. Next Steps and Closing Comments

The following is a summary of the Workgroup's discussions.

### **1. Welcome and agenda**

The Chair welcomed Workgroup members.

#### Summary of discussion:

There was no further discussion by the Workgroup.

### **2. Review and compare transplant program protocols**

The Workgroup discussed the different protocols they use at their centers to conduct the six-minute walk test (6MWT).

Protocols differed by oxygen prescriptions used. Oxygen is often prescribed by exercise, maximum oxygen, or for activities of daily living. There is a multi-test approach to the 6MWT by members. Protocols also vary by level of exertion. Members conduct resting assessments, three-minute walks at a normal pace followed by three-minute walks at maximum pace, six-minute walks on a flat surface at a vigorous pace, and six-minute walks on a flat surface walking at a normal pace. Members also incorporate a treadmill at some transplant programs.

Commonalities were seen when increasing oxygen at two liter/minute increments, but protocols vary in terms of oxygen saturation benchmarks. Members use varying devices when titrating oxygen. Possibilities include a candidate's usual device, a portable standard e-cylinder on wheels, standard nasal cannula and a rollator, a non-rebreather, or a combination of other devices.

Whether programs are titrating during the 6MWT differs as well.

#### Summary of discussion:

**Decision #1:** The Workgroup will continue to discuss best approaches for standardizing oxygen delivery, oxygen titration, and number of walks needed for the 6MWT.

Workgroup members discussed the different protocols they use at their specific centers. Multiple members noted they are performing an oxygen titration study and a 6MWT. Members voiced concern over patient comfort when performing two tests and suggested leaving these decisions up to transplant programs. Other members emphasized the need for two tests: one test that factors into the post-transplant survival score and one test that factors into the medical urgency score. Another member suggested two tests for listing and therapeutic purposes.

A member suggested waiting on standardization of the 6MWT for the implementation of [Update Data Collection for Lung Mortality Models](#) in order to capture different oxygen levels at rest, with sleep, and with exercise only. Other members stated that standardization is needed now.

A member suggested two tests should be administered at evaluation, but two tests may not be needed for future 6MWTs if oxygen needs do not change. Members also disagreed on a benchmark of 88% versus 80% for oxygen saturation. While studies suggest that it is safe to use 80% oxygen saturation as a threshold for the 6MWT, some members did not feel comfortable using that as a threshold for all lung transplant candidates. For example, some candidates like those with congenital disease may be routinely well below 88% oxygen saturation and able to drop to 80%, but members would have concerns about candidates with pulmonary hypertension dropping to 80%. Members will continue this discussion in future meetings.

### **3. Discuss next steps**

The Workgroup discussed next steps for future meetings.

#### Summary of discussion:

Decision #2: The Workgroup will examine standardization through policy, guidance, or data collection. The Workgroup will then review a summary of where there is agreement and disagreement over the standardization of the 6MWT.

### **4. Next steps and closing comments**

The Chair thanked members for joining.

#### Summary of discussion:

There was no further discussion by the Workgroup.

### **Upcoming Meetings**

- July 27, 2023, teleconference, 5pm EST

## Attendance

- **Workgroup Members**
  - Marie Budev
  - Erika Lease
  - Aleksander Tomas
  - Brian Armstrong
  - Dennis Lyu
  - John Reynolds
  - Julia Klesney-Tait
  - Kevin McCarthy
  - Soma Jyothula
- **HRSA Representatives**
  - Jim Bowman
- **SRTR Staff**
  - Katherine Audette
- **UNOS Staff**
  - Kaitlin Swanner
  - Taylor Livelli
  - Tatenda Mupfudze
  - Samantha Weiss
  - Susan Tlusty
  - Krissy Laurie
  - Chelsea Weibel