

**OPTN Lung Transplantation Committee**  
**Promote Efficiency of Lung Allocation Workgroup**  
**Meeting Summary**  
**June 23, 2023**  
**Conference Call**  
**Marie Budev, DO, Chair**  
**Matthew Hartwig, MD, Vice Chair**

## **Introduction**

The Promote Efficiency of Lung Allocation Workgroup (the Workgroup) met via Citrix GoTo teleconference on 6/23/2023 to discuss the following agenda items:

1. Welcome and agenda
2. Background
3. Project Purpose
4. Review Data and Discuss Potential Solutions
5. Next Steps and Closing Comments

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

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

The Past Chair welcomed Workgroup members.

#### Summary of discussion:

There was no further discussion by the Workgroup.

### **2. Background**

[\*Establish Continuous Distribution of Lungs\*](#) was implemented on March 9, 2023. Early monitoring shows upward trends in the number of transplant programs receiving offers before acceptance, the median offer number at acceptance, and the distance traveled by organs. This has increased the burden for transplant programs and has slightly delayed allocation for organ procurement organizations (OPOs). The number of lung transplants under lung continuous distribution has remained constant and may be trending upward slightly.

#### Summary of discussion:

There was no further discussion by the Workgroup.

### **3. Project Purpose**

The purpose of this Workgroup is to promote efficiency of lung allocation through tools to address challenges. The goal is to quickly advance solutions that do not require changes to policy or data collection and then develop a public comment proposal for solutions that require policy or data collection changes. This will be measured by the number of offers sent after the final acceptor.

The OPTN Lung Transplantation Committee noted a frequency of offers deep on the match run, a lack of ability to set different recovery distances for donor after circulatory death (DCD) donors versus donation after brain death (DBD) donors. There is currently no way to opt in to offers from geographically isolated

areas without broadly expanding maximum recovery distances. The OPTN OPO Committee noted OPOs are coordinating with more transplant programs and allocation is more complex.

- Potential solutions could include:
  - Updates to OPO offer notification limits
  - Creation of offer filters for lung
  - Changes to donor acceptance criteria
  - Updates to required lung donor testing

#### Summary of discussion:

A member asked how OPOs decide how many offers to send out to transplant programs. A member commented OPO offer behavior varies.

#### **4. Review Data and Discuss Potential Solutions**

OPOs choose how many offers they want to send out at a time for “local” candidates. For “non-local” offers, system notification limits kick in. The distance range for “local” offers, and therefore when the system limits kick in, varies by organ. OPOs can offer another “batch” after the system limit kicks in. Data suggests that system notification limits may be kicking in sooner since implementation, given the longer distances for candidates high on the match run. However, the current limits still allow notifications to 350 to 400 candidates at a time. A relatively simple change could be to reduce the distance at which the system notification limits kick in. Notification limits do not prevent any candidates on the match from getting an offer, but only slow the rate at which OPOs can offer down the list. Offer filters describe what donor the transplant program will not accept and is only currently an option for kidney. This could be expanded to lung. Offer filters differ from donor acceptance criteria which include criteria of a donor a transplant program will accept and is in place for all organs.

The Workgroup discussed:

- What distance would be appropriate as a notification limit for lung offers?
- Is there another threshold besides distance that would be better for determining when limits on offers should go into effect?
- Do you have other suggestions for improving the efficiency of this process?

#### Data Summary:

SRTR staff showed a dashboard that displays metrics from the pre-policy era and from implementation of continuous distribution of lungs through May 1, 2023. The median transplant program at acceptance pre- and post-implementation of continuous distribution of lungs jumped from about four to about 10. The median offer number at acceptance was between six and eight prior to implementation and has been trending upward to around 14 to 15. The median number of transplant programs notified about potential donor lungs jumped to 30 from 18 to 20 under the LAS.

Staff presented data that focused on two-months pre- and post-implementation of [Establish Continuous Distribution of Lungs](#).

The pre-policy era was from January 8<sup>th</sup>, 2023 to March 8<sup>th</sup>, 2023 and the post-policy era was from March 9, 2023 to May 8, 2023. The number of transplants from April 9<sup>th</sup>, 2023 to May 8<sup>th</sup>, 2023, was 274 transplants, compared to a maximum of 264 under the LAS between 1/9/2022 – 3/8/2023. The median distance traveled is 355.5 nautical miles (NM) in the post-policy era as opposed to 180 NM in the pre-policy era. For DCD donors, the median distance from donor hospital to transplant programs increased to 255.5 NM from 199 NM in the post-policy era. For non-DCD donors, this distance increased to 365.5 NM from 176 NM in the post-policy era.

Staff presented an analysis of offer data for lung matches one-month post-implementation. Offer counts by transplant program one-month pre- and post-implementation had a median increase of 15.6%. The median change was a 1.75% decrease. This is due to a shift in distribution with fewer outliers. Fewer centers have very high or low offer counts and the distribution is more equitable. The median transplant program offers per match was an 8.3% increase, but there was a median transplant program change in offers per match of an 8.2% decrease. Batches are much smaller, but occasionally there are large batch offers. The median batch minutes per candidate by OPO varies geographically by OPO.

Summary of discussion:

Decision #1: Members would like additional data on the effects of increasing notification limits and how batch offer behavior has changed pre- and post- implementation of [Establish Continuous Distribution of Lungs](#).

Decision #2: Members want to examine policy changes to required lung donor testing to help improve lung allocation efficiency.

The Past Chair stated OPOs are putting out large batches of offers without waiting for responses from sequence number one to 20. A member commented it may be helpful to look at offers when the organ ultimately winds up being accepted. Offers are made when the lungs have obvious contraindications. He noted OPOs are motivated to get as many acceptances as possible, while transplant programs are motivated to transplant as much as possible with good outcomes. Staff responded the number of organs recovered and then transplanted went up, the number of donors that had one lung recovered stayed the same, and the number of donors that had two lungs recovered and not transplanted went down.

A member asked to see what batch minutes look like before [Establish Continuous Distribution of Lungs](#) was implemented.

A member commented a distance threshold may not be the best way to improve this and better filters would be a better option. He noted notification limits would just lead to OPOs sending out more batches. He noted additional filters would be helpful for size matching (e.g. consider predicted total lung capacity as well as height), and for human leukocyte antigen (HLA) information on the donor to be available prior to running the match.

A member stated she is concerned allocation time will be delayed if OPOs are limited further on where they can offer. A member responded transplant programs are delayed in reviewing offers when they receive a massive amount of offers at once. A member commented the test results needed to make decisions on lung offers are often not available for transplant programs. Members agreed.

**5. Next steps and closing comments**

Staff suggested the Workgroup could look at required lung donor testing in the next call. The Past Chair thanked members for joining.

Summary of discussion:

The Past Chair asked if the Workgroup could examine the benefit of notification limits. SRTR staff stated notification limits will likely not fix the issue and this issue is behavioral. SRTR staff offered to evaluate the number of notifications to transplant programs below where the lungs were accepted on the match run.

## Upcoming Meetings

- TBD

## Attendance

- **Workgroup Members**
  - Erika Lease
  - Dennis Lyu
  - Greg Veenendaal
  - Ed Cantu
  - Pablo Sanchez
  - Jackie Russe
  - Tina Melicoff
- **HRSA Representatives**
  - Jim Bowman
- **SRTR Staff**
  - Katherine Audette
  - Nicholas Wood
- **UNOS Staff**
  - Kaitlin Swanner
  - Beth Overacre
  - Kate Breitbeil
  - Cass McCharen
  - Holly Sobczak
  - Taylor Livelli
  - Robert Hunter
  - Samantha Weiss
  - Susan Tlusty
  - Krissy Laurie
  - Laura Schmitt
  - Lauren Mauk
  - Chelsea Weibel