OPTN Lung Transplantation Committee Promote Efficiency of Lung Allocation Workgroup Meeting Summary September 10, 2024 Conference Call

Matthew Hartwig, MD, Chair Dennis Lyu, MD, Vice Chair

Introduction

The Promote Efficiency of Lung Allocation Workgroup (Workgroup) met via Webex teleconference on 09/10/2024 to discuss the following agenda items:

1. Modify Lung Donor Testing: Data Standardization Checklist

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

ORGAN PROCUREMENT

AND TRANSPLANTATION NETWORK

1. Modify Lung Donor Testing: Data Standardization Checklist

On May 21, 2024, the Workgroup recommended the Promote Efficiency of Lung Donor Testing <u>proposal</u> to the Lung Transplantation Committee. This included updates to <u>OPTN Policy 2.11.D</u>: *Required Information for Deceased Lung Donors* and <u>Guidance</u> on Requested Deceased Donor Information.

The Modify Lung Donor Testing project includes data collection and other system changes. The Workgroup has recommended changes related to donor diagnostic testing, cigarette smoking history, marijuana smoking history, vaping history, predicted Total Lung Capacity, and Peak Inspiratory Pressure (PIP).

Summary of discussion:

The Workgroup recommended the following definition for PIP: *The highest pressure delivered by the ventilator at any instant during a single ventilatory cycle*. The acceptable range of PIP values should be 10-50 centimeters of water pressure (cmH2O). Unknown should be a response option for PIP. There was support for collecting the date and time PIP was recorded from the ventilator.

The Workgroup recommended the following definition for cigarette smoking: *The inhalation of smoke from a burning cigarette into the lungs*.

The Workgroup recommended the following definition for marijuana smoking: The inhalation of smoke or vapor released by heating the flowers, leaves, or extracts of cannabis and releasing the main psychoactive chemical, $\Delta 9$ -tetrahydrocannabinol (THC), which is absorbed into the bloodstream via the lungs.

There was agreement to amend previously recommended response options for marijuana smoking history.

The Workgroup recommended the following definition for diagnostic test: A test that is used to help diagnose a condition or illness in a patient. These diagnostic testing results are collected by the OPTN Donor Data and Matching System.

The Workgroup reviewed OPTN data collection principles and a data standardization checklist for proposed data elements in the Modify Lung Donor Testing project.

Purpose:

1. What is the intent or purpose of collecting this specific data element?

Data Definition:

- 1. Is there an industry-standard or established clinical definition for the data element? (CMS, professional society, etc.)
- 2. What unit of measurement will be used?
- 3. What are the acceptable responses or response range for this data element?
- 4. What are the non-plausible value ranges for this data element?
- 5. If unknown values (e.g. missing, not reported, unknown) are acceptable responses, what instruction will be provided when/in what specific cases those values are appropriate?
- 6. For data elements that may change over time, what timeframe should be included in the label and definition?
- 7. Should a date field also be included?

Availability:

- 1. Is this element widely available for the population of patients for which it is sought to be collected?
- 2. Does this element require additional testing (e.g. invasive procedure) or measurement that is not commonly done?

Burden:

1. Are the data easily discovered by a clinical and non-clinical coordinator in EHR?

For some items above, the Workgroup confirmed information from their previous recommendations and discussions. The below sections summarize new or updated discussion points and recommendations by the Workgroup.

Peak Inspiratory Pressure (PIP)

The purpose of collecting PIP is to provide information about donor lung compliance. The Workgroup supported the following definition for PIP: *The highest pressure delivered by the ventilator at any instant during a single ventilatory cycle.* The acceptable range of PIP values should be 10-50 centimeters of water pressure (cmH2O); several clinicians on the call reported they have not seen values above 50. Unknown should be a response option, as it would be preferable to a missing value.

There was support for collecting the date and time PIP was recorded from the ventilator. Some members expressed a preference to have PIP reported alongside arterial blood gases, or challenge gases, as proposed in the *Promote Efficiency of Lung Donor Testing*. Members noted this would prevent confusion, as PIP values would be inaccurate if recorded during lung recruitment.

Cigarette Smoking History

The Workgroup supported the following definition for cigarette smoking: The inhalation of smoke from a burning cigarette into the lungs. Members considered substituting the word "cigarette" with "tobacco" to ensure cigar smoking is reported, however, kept "cigarette" to promote consistency in terminology across databases (ie. Organ Procurement Organization (OPO) and OPTN databases).

Marijuana Smoking History

The Workgroup recommended the following definition for marijuana smoking: The inhalation of smoke or vapor released by heating the flowers, leaves, or extracts of cannabis and releasing the main psychoactive chemical, $\Delta 9$ -tetrahydrocannabinol (THC), which is absorbed into the bloodstream via the lungs.

There was agreement to amend previously recommended response options for marijuana smoking history; the option "multiple times daily" should be removed and "less than monthly" should be replaced with "less frequently". This data element is not discretely collected on the donor risk assessment interview (DRAI) forms currently used by OPOs. Some members felt the aforementioned response options were overly burdensome to OPOs as such granularity is not clinically meaningful.

Vaping History

The Workgroup recommended the following definition for vaping: *The inhalation of vapor through the mouth from a usually battery-operated electronic device (such as an electronic cigarette) that heats up and vaporizes a liquid or solid.*

Diagnostic Testing Status

The Workgroup recommended the following definition for diagnostic test: A test that is used to help diagnose a condition or illness in a patient. These diagnostic testing results are collected by the OPTN Donor Data and Matching System. It was noted that date and time of diagnostic tests are already collected by the OPTN.

Next steps:

The Workgroup will seek feedback from the OPTN Lung Transplantation Committee on Workgroup recommendations for the Modify Lung Donor Testing project.

Upcoming Meetings

• October 8, 2024, teleconference, 5PM ET

Attendance

• Workgroup Members

- o Marie Budev
- o Dennis Lyu
- o Dan DiSante
- o Erin Halpin
- o Erika Lease
- o PJ Geraghty
- Greg Veenendaal
- o Jackie Russe
- o Ernestina Melicoff
- o Ed Cantu
- o Thomas Kaleekal
- o Julia Klesney-Tait
- o Mike Morrow
- HRSA Representatives
 - o James Bowman
- SRTR Staff
 - o David Schladt
- UNOS Staff
 - o Kelley Poff
 - o Kaitlin Swanner
 - o Sara Rose Wells
 - o Susan Tlusty
 - o Leah Nunez
 - o Chelsea Hawkins
 - o Holly Sobczak
 - o Samantha Weiss
 - Houlder Hudgins