Final Report

OPTN Liver and Intestinal Transplantation Committee

Descriptive Data Request

Additional Stratifications of Deceased Donor Liver Transplants from Out-of-the-Gate Monitoring of Liver and Intestine Acuity Circle Allocation, 1 Month Report Removal of DSA and Region as Units of Allocation

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By:

Samantha Noreen, PhD UNOS Research Department

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Background/Purpose

Additional stratifications of deceased donor liver transplant recipients and deceased donor livers recovered and not transplanted were requested after the first month activity report on the acuity circle policy change was distributed to the Committee. There was concern that metrics provided at a national level would potentially homogenize results, and a more granular review of the information provided was requested.

Strategic Plan Goal or Committee Project Addressed

The project is in alignment with monitoring the changes in liver allocation policy to acuity circles allocation.

Committee Request

Provide counts of deceased donor liver transplants, during 2/05/2019 - 3/04/2019 (Pre era), 1/07/2020 - 2/03/2020 (Pre era), and 2/04/2020 - 3/02/2020 (Post era), stratified by donation service area (DSA) of transplant program, as well as:

- DCD vs. DBD status of donor
- Local (defined as transplant program located within same DSA as donor hospital) vs. non-local (defined as transplant program located outside of DSA of the donor hospital) share type

Provide counts of deceased donor livers recovered for transplant, during 2/05/2019 - 3/04/2019 (Pre era), 1/07/2020 - 2/03/2020 (Pre era), and 2/04/2020 - 3/02/2020 (Post era), stratified by donation service area (DSA) of transplant program, as well as:

Not transplanted vs. transplanted status

Cohorts

The cohort examined contains three periods to reivew 4 full weeks of data after the liver policy change, and two comparison periods.

- The first pre-policy era is from Tuesday, February 05, 2019 to Monday, March 04, 2019, referred to as "Pre (2/05/2019-3/04/2019)" era, to consider seasonal changes.
- The second pre-policy era is from Tuesday, January 07, 2020 to Monday, February 03, 2020, referred to as "Pre (1/07/2020-2/03/2020)" era.
- The time period beginning upon implementation of the policy change is from Tuesday, February 04, 2020 to Monday, March 02, 2020, referred to as "Post (2/04/2020-3/02/2020)" era.

The data sets listed below, each for the time periods previously specified, are used in the descriptive tables and graphs in this report:

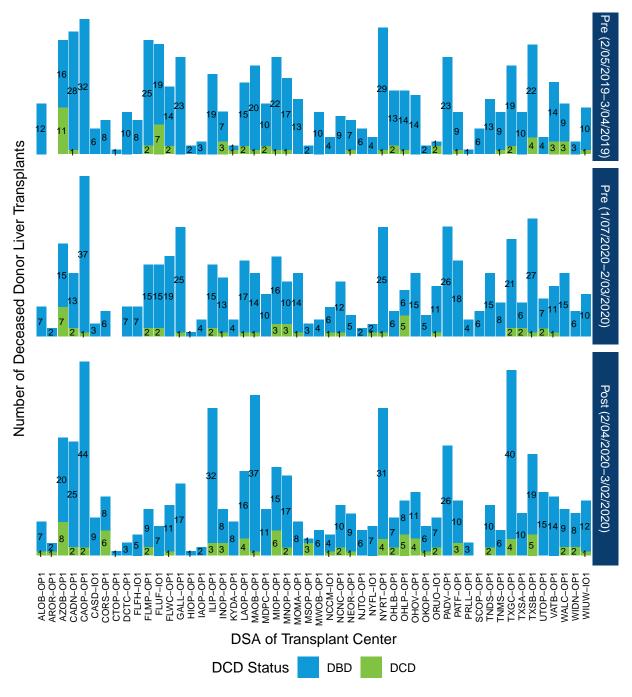
- Candidates that received a liver transplant
- Deceased donors with a liver recovered for transplant

The following results are presented by week. As data accumulate, data will be shown more in aggregate versus on a weekly basis. This analysis is based on OPTN data as of March 27, 2020 and is subject to change based on any future data submission or correction.

Analysis by donation service area (DSA)

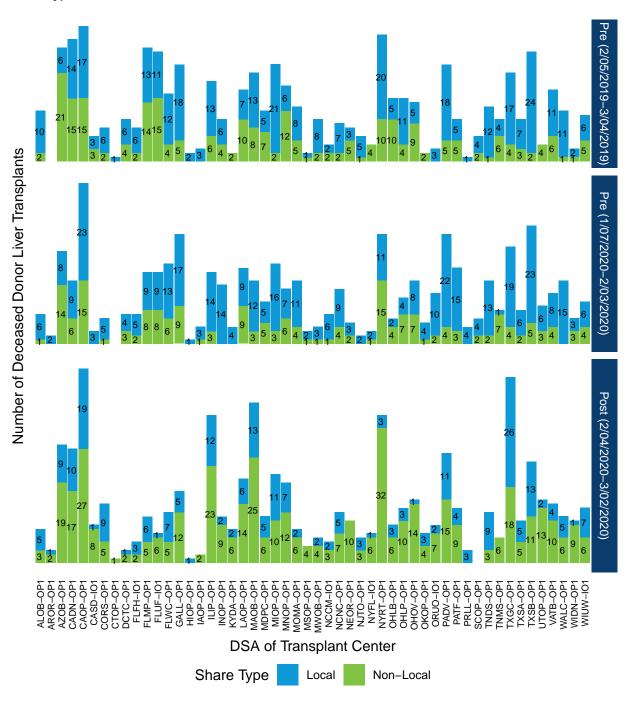
There were 654 total deceased donor liver transplants in the Pre (2/05/2019-3/04/2019) era, 616 in the Pre (1/07/2020-2/03/2020) era, and 704 in the Post (2/04/2020-3/02/2020) era.

Figure 1. Number of Deceased Donor Liver Transplants by Era, DSA of Transplant Center, and Donor DCD Status



 $^{^{\}star}$ Average Count of DCD Transplants Across DSAs was 2 for Pre (2/05/2019–3/04/2019), 2 for Pre (1/07/2020–2/03/2020) and 3 for Post (2/04/2020–3/02/2020)

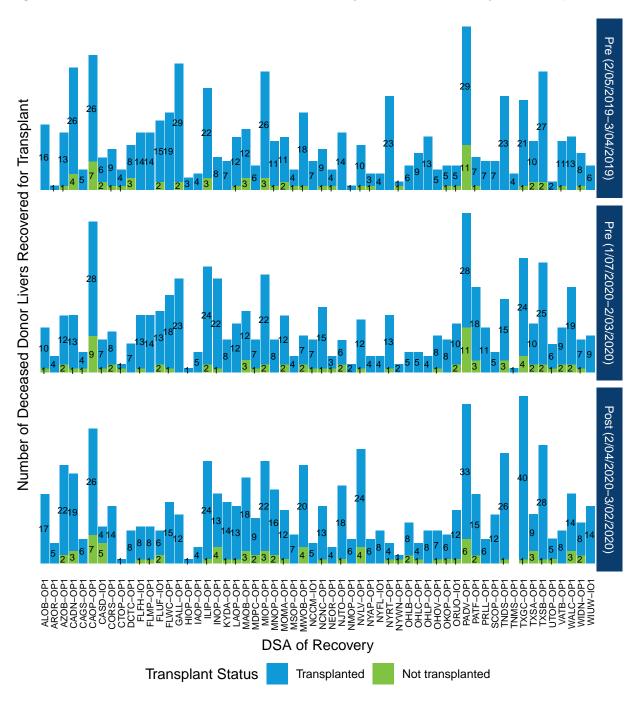
Figure 2. Number of Deceased Donor Liver Transplants by Era, DSA of Transplant Center, and Donor Share Type



^{*} Average Percent of Transplants Occuring within the Recovering DSA, Across DSAs, was 66% for Pre (2/05/2019-3/04/2019), 71% for Pre (1/07/2020-2/03/2020) and 39% for Post (2/04/2020-3/02/2020)

There were 64 total deceased donor livers recovered for transplant and not transplanted in the Pre (2/05/2019-3/04/2019) era, 76 in the Pre (1/07/2020-2/03/2020) era, and 77 in the Post (2/04/2020-3/02/2020) era.

Figure 3. Number of Deceased Donor Livers Recovered by Era, DSA of Recovery, and Transplant Status



^{*} Average Percent of Livers Recovered for Transplant and Not Transplanted Across DSAs was 15% for Pre (2/05/2019–3/04/2019), 15% for Pre (1/07/2020–2/03/2020) and 15% for Post (2/04/2020–3/02/2020)

Conclusion

This report serves as an early look at high-level metrics to evaluate any early indications that the policy may be trending towards achieving intended goals, as well as to evaluation potential intended and unintended consequences of the liver and intestine policy changes implemented on February 04, 2020. At this point, metrics are constrained to data points that are reliably available while allowing for the data submission lags allowed in OPTN policy.

Across DSA, these early metrics suggest a slight increase in the average number of DCD deceased donor liver transplants and the percent deceased donor liver transplants that are non-local (i.e. the OPO serving the donor hospital is outside the DSA of the transplant center). They do not suggest changes in the discard rate across DSA. However, the system will continue to be monitored closely and metrics and trends will continue to be added as more time and data accrue. Future reports will contain more comprehensive analyses of the waiting list cohort, transplant recipient cohort and utilization. Additionally, as data accumulate, data will be shown more in aggregate versus on a weekly basis. Future analyses will also consider comparisons to expected trends and directions from SRTR modeling results.