OPTN Ethics Committee Meeting Summary March 31, 2023 Detroit, MI

Keren Ladin, PhD, Chair Andrew Flescher, PhD, Vice-Chair

Introduction

The Ethics Committee met in Detroit, MI on 03/31/2023 to discuss the following agenda items:

- 1. Welcome
- 2. Review of Multiple Listing Public Comment Feedback
- 3. Discussion of Multiple Listing
- 4. Review of Normothermic Regional Perfusion (NRP) White Paper
- 5. Update on Liver Continuous Distribution
- 6. Closing Remarks

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

1. Welcome

The Chair, Vice Chair, and staff welcomed members to the meeting and introduced the agenda. Members participated in an icebreaker.

2. Review of Multiple Listing Public Comment Feedback

The Committee heard feedback from public comment and reviewed the public comment analysis provided.

Data summary:

Staff presented the metrics from the public comment cycle, highlighting that the proposal received a Likert score of 3.1 out of 5. Statements from various societies were also presented, with many statements indicating the importance of equity work but unsure if altering the multiple listing policy was an appropriate method use of resources at this time. There were concerns from the public regarding patient autonomy and unintended consequences related to pediatric patients and veterans.

Another concern was the impact continuous distribution might have on the frequency of multiple listing, with some responses indicating that multiple listing will play a much smaller role as continuous distribution expands to more organ types.

Next steps:

The Committee will discuss the public comment feedback and decide whether changes to the white paper are warranted, and if so, what changes those might be.

3. Discussion of Multiple Listing

Summary of discussion:

The Chair presented three potential options to the Committee, whether it should be sent with minor edits and changes to the OPTN Board of Directors for a vote in June, whether the paper should be modified and edited accordingly given the public comment feedback, or whether the Committee would like to withdraw the paper from consideration at the June Board meeting, potentially revisiting the white paper after continuous distribution has become more prevalent.

A member asked for clarification on the data pertaining to wait times for multiply listed patients, since it appeared that wait time was longer, another member confirmed that the data shows the wait times as being longer but the rate of transplant for multiply listed patients was faster.

Members discussed the option to reframe the existing paper instead of making major edits or changes, as the main concerns brought up in public comment related to fear that options would be taken away from patients. Another member opined that if multiple listing opportunities are concerns for patients, then transplant centers should not be able to regulate whether a patient can multiple list with them, as this is currently applied inconsistently across the nation.

One member suggested that providing the Board of Directors with more options for improvement might result in a more productive vote. Members discussed what those potential options might be recommendations from the Patient Affairs Committee and the Minority Affairs Committee included increasing education on multiple listing and considering the circumstances of some patients in rural areas who might benefit when given the opportunity to multiple list.

A member opined if a resubmission of the paper addressing the concerns from public comment would be agreeable. Another member felt strongly that the paper should not move forward to the Board as the disparities caused by multiple listing are not greater than the barriers that would exist without the option, in their opinion. An additional member agreed with this point and emphasized that the white paper mentions patients who are difficult to match should be allowed to multiple list still, but that this term was not clarified.

Members discussed whether a re-review would be appropriate in light of continuous distributions rollout across different organ types. The Chair assented that this might be appropriate to include in a revision of the white paper, additionally they voiced concern for weakening the stance of the paper against the disparities that multiple listing exacerbates.

The Vice Chair recommended writing an addendum to address the specific concerns from public comment, advocating for transparency of the process and the Committees ethical analysis. The Committee discussed various topics to address further following public comment which included, clarifying the definition of patient autonomy, a recommendation to the Board of Directors to reframe and optimize allocation in relation to multiple listing, providing clarification on which vulnerable populations might need to remain beneficiaries of multiple listing, addressing concerns related to transplant programs being able to deny multiple list, and writing an addendum which would address any other concerns from public comment.

A visiting Board member provided their perspective on the paper, stating that concerns related to limiting or taking away the option to multiple list can cause a visceral reaction. Members concurred that maintaining public trust in the system is of the utmost importance and this paper should not jeopardize that. Members discussed rewording the paper to focus more on leveling the playing field, instead of framing it as a limiting of options. The Committee considered two additional points they would highlight to the Board, first clarifying which candidates are most unlikely to benefit from multiple listing, and second encouraging more education and information for candidates so that multiple listing is understood better. Additionally, a member suggested reframing prioritization attention to those candidates who underutilize multiple listing and that they should receive more education and

information. Another member contended that if every candidate multiple lists, then technically nobody benefits from it.

The Committee took a straw poll vote to decide on changing the white paper before sending to the board, but not yet on the changes themselves, all were in favor but one member. This member voiced their concern that the Committee appears to have changed their initial stance on the multiple listing policy, opining that it seemed to be a reversal of previous opinion. Their concern related to changes that would reframe the Committees recommendation to the Board, as it seemed now that the Committee was advocating for the policy. Another member clarified the potential changes as bringing the Boards attention to the underutilization of multiple listing by vulnerable populations.

The Chair suggested that even with an unpopular analysis, the white paper can move forward with minimal revision since the Committee feels strongly about their analysis. The Committee also discussed the potential of not providing recommendations, stately simply the analysis and that the status quo is unacceptable and requires revision. A member questioned why there would be no recommendation, since there were already options available to which the Chair responded that there may be scenarios and recommendations the Committee has not considered, and as such a sweeping judgement might not be appropriate in this situation.

The Chair recommended adding a section to the briefing paper that would outline the vote the Committee took, stating that it was almost unanimous. Additionally, the white paper could be amended to be more open-ended, which would allow for greater variety of policy recommendations in the future.

Next steps:

The Committee agreed to rework the white paper in light of the public comments, to strategically soften the recommendations. The Vice Chair committed themselves to writing the addendum which would specifically address points from public comment. Staff confirmed with the Committee that changes would be made and would send the final draft out for review in the following week so that a revote could be taken at the next Committee meeting.

4. Review of Normothermic Regional Perfusion (NRP) White Paper

The Committee reviewed the draft white paper including comments and feedback from members of the NRP Workgroup and provided suggestions about how to move the draft forward.

Presentation Summary:

The Chair noted that NRP is a highly relevant, challenging topic where there are a lot of opinions. The Chair went over the outline of the paper and noted that the white paper will not provide any policy recommendations, but rather will provide ethical analysis. The composition and task of the Workgroup was explained, and the Chair explained that a diverse group of experts came together to produce the draft. The main points of the white paper were presented.

Main Points of the White Paper

NRP has great potential for utility benefit. Utility is necessary, but insufficient to demonstrate that a practice is ethical. NRP raises serious concerns about compliance with the Dead Donor Rule: circulation is restored regionally in donor after circulatory death has been declared, giving rise to questions that are morally meaningful as to whether the person continues to meet criteria required for determination of death, the criterion of permanent cessation of circulation potentially violated when circulation is restored, and this concern could be mitigated by clarification of the Uniform Determination of Death Act to remove necessity of permanence or irreversibility.

NRP raises concerns about the potential for harm to the donor occurring from the procedure and the assumption that the donor is insensate. These concerns could be mitigated by further studies demonstrating that blood flow to the brain following regional perfusion is minimal and does not raise concerns about the potential for sensation. In the interest of public trust, respect for persons, and transparency, authorization should include disclosure of recirculation through the heart (TA-NRP) and the unknown issue of restoration of any cerebral circulation (TA-NRP and A-NRP), as well as considerations of morally meaningful differences from other donation approaches. Uncontrolled NRP scenarios present serious concerns for respect for persons and may confuse the public perceptions of proceeding too quickly from therapeutic treatment to recovery.

The Chair also explained some specifics on do no harm, respect for persons, logistics of informed consent, uncontrolled NRP, and utility. The paper draft concludes by saying The OPTN should proceed cautiously regarding the practice of NRP for organ procurement and that the following ethical considerations require serious consideration and resolution:

- Assurance that NRP adheres adherence to the Dead Donor Rule
- Nonmaleficence must not be violated in the pursuit of NRP, even if positive utility outcomes could result.
- Standardized and transparent protocols, including adequate informed consent and authorization of patient donors (pre-mortem) and of donor families, are necessary pre-conditions for any ethical pursuit of NRP.
- The Committee agreed that the uncontrolled scenarios for any form of NRP should not be performed because of added concern regarding nonmaleficence and respect for persons.

Summary of discussion:

The Vice Chair noted that the dead donor rule (DDR) is something that is currently being debated and that the debate and implications are highly relevant to this project. Also, the Vice Chair explained that there is a concern if the criteria for declaring death are not sustained throughout the NRP process, and that these two things are related.

A member stated the paper is well balanced and explains NRP and its implications well. Several members agreed with this sentiment. A member shared that from an organ procurement organization (OPO) perspective, if there is an instance of spontaneous reanimation after declaration of death in a DCD donor, the donation does not proceed. This member explained hesitation with NRP: in their view, there is not an ethical difference between the deliberate or spontaneous restarting of the heart.

Another member shared some historical context surrounding NRP and organ procurement in general, and noted the logistical challenge of getting organs that are still able to function in a recipient from a donor who is dead. This member shared that the fact that NRP is accepted in several other countries may lead to the eventual acceptance of NRP in the United States and changes to interpretation of the DDR. A member noted that we do not ask those participating in DCD procurement to prove that there is no harm done to the donor, and asked if proving no harm to the donor is the correct threshold to be aiming for with NRP. A member responded, explaining that the Committee should be cautious in use of the terms insensate and pain, because they do not know the level or capacity for brain function even after 5 minutes of a potential donor being pulseless. The Chair stated that there is less concern about DCD donation violating a declaration of death than NRP, and raised the question to the group of what the moral relevance is placed on pain and death. The Chair explained that in NRP, we do not currently

have assurance that the donor's death was legitimate nor the assurance that the donor does not feel pain and explained that these things may be morally important for the community.

The Chair showed some positive feedback from Workgroup members, then explained some specific themes that came up during member review of the draft. Several members shared their thoughts on the use and relevance of the term insensate as used in the draft. A member shared that their concern with the use of the term insensate may be used to draw conclusions about standard DCD, and the Committee needs to consider how to best convey the issue in clear language. A member stated that they agreed with the use of the term insensate instead of the word pain. The Committee discussed TA-NRP and A-NRP, their differences, and implications on the use of the word insensate. The Vice Chair noted that one unresolved issue with NRP is the separation of the clinical care team and the recovery team if the determination of death is violated throughout the course of NRP. A member pointed out that in their view, clamping of the vessels in NRP allows the natural process of brain death to continue. Wanting additional assurance about blood flow to the brain is important, but this member cautioned the Committee that recommending this may have greater implications for donation in general. This member explained that most people are in agreement with the utility and consent parts of the paper, and that the most concern lies in the declaration of death during NRP. Members discussed this. The Chair noted that there are difficulties with NRP and the typical definition of death, especially when considering intent. Members discussed declaration of death and definitions of death, the hands-off period, intent, separation of clinical and recovery teams, and NRP protocol. The Vice-Chair stated that intent and the legal framework for death share an interesting and crucial relationship. A member stated that in their view, intent is irrelevant to whether a person is dead or not. A member asked the Committee to consider a hypothetical situation where a competent examiner walks into a room where NRP is occurring, and asked the Committee if this person would be able to make a determination about if the individual on the table is dead or alive. Members discussed the role of ligating blood vessels during NRP.

The Committee also discussed protocol differences and different studies conducted in the US and in Europe, and how these are presented in the draft. A member explained that standard DCD protocols may need to be explained more clearly in the draft so that readers can understand how NRP is unique. Members discussed that it is very important to make the paper readable and understandable to members of the general public, because everyone is a potential stakeholder in NRP and in donation in general.

The Vice Chair noted that the Committee may wish to add a footnote explaining the Committee's outlook on intent and determination death. The Chair stated that it is not within the purview of the Committee to interrogate the definitions of death but it may be a good idea to acknowledge death as a process. Members discussed the best way to discuss this in the draft.

A member asked if harm to the donor families is taken up in the draft, and the Chair explained that this is discussed in the most current draft. The Chair asked if there are specific changes members would like to see made to the draft before it is ready to go out for public comment. Several members affirmed that the current draft is balanced. A member suggested that some of the language may be too strong, specifically surrounding the logistics of NRP and legal analysis, and recommended softening some areas of concern. Another member stated that the issue of whether re-perfusion is ethically different depending on if it happens ex vivo or in situ may need to be clarified in the draft because this may have other implications. A member commented that while the Uniform Declaration of Death Act (UDDA) is relevant to these conversations, in their view, any potential clarifications or modifications to the UDDA will not resolve any concerns about NRP. This member suggested modifying a part of the draft that

could be interpreted as saying this. This member also stated that the Committee could recommend to the National Academies of Science, Medicine, and Engineering (NASEM) to take up this issue of NRP and provide their analysis.

Members then discussed possible implications of the white paper on Organ Procurement Organizations (OPOs) and hospitals. Hospitals and OPOs may choose to perform or not perform, and accept or not accept, organs procured via NRP currently. Staff clarified that this white paper would have no implications for OPOs or programs at this time, because the white paper does not change policy. Members also discussed the informed consent piece of the paper and possible modifications to this section.

The Chair and Vice Chair explained that the ethical analysis is important for the Committee to take up and is relevant to the community at this time. A member explained that this analysis is important, but cautioned that the community will interpret the content of the white paper to be representative of the OPTN's position, not just the Committee's.

Staff summarized some specific areas of the paper that will be re-worked as a result of this discussion. Namely, the parts discussing compliance with the dead donor rule, potential harm to the donor, tone of the language, informed consent requirements for NRP, and modifications to the UDDA will be reevaluated. The Chair noted that acknowledging the various audiences that will read the white paper is also an important modification to the paper. The Committee reached a consensus to feel comfortable moving forward with a revised version of the paper with some of the aforementioned changes.

Next steps:

Staff will work with Committee leadership to make the appropriate changes to the paper and bring the updated draft back for Committee review.

5. Update on Liver Continuous Distribution

The Committee received an update on liver continuous distribution and provided feedback.

Presentation Summary:

Staff recapped the prior Committee white paper on continuous distribution. Then, staff explained where the OPTN Liver and Intestine Transplantation Committee is at in the process of developing continuous distribution and where Ethics Committee feedback would be useful.

The goal of continuous distribution is to remove boundaries between the classifications that exist in the current allocation system. Continuous distribution, a points-based system based on a set of goals, will result in improved equity for candidates on the waitlist, increased transparency in the allocation system, and more potential flexibility for future policy changes and implementation. Continuous distribution will rank candidates based on a composite allocation score (CAS), that aligns with the different requirements found in the OPTN Final Rule and the National Organ Transplant Act (NOTA).

For each attribute, the Committee will develop rating scales and weights to build a draft framework for liver and intestine allocation. This framework is made up of attributes with their own rating scales and weights. Rating scales are functions that calculate how much priority is assigned to each candidate on a match run for a specific attribute. Rating scales are derived from clinical or operational data or on value judgments. Weights reflect the relative importance of each attribute in the CAS. The sum of the weights equals 100%, and the weights are based on values-based judgments.

The Liver and Intestine Committee has identified attributes and sent them out for community input through a values prioritization exercise (VPE) to help determine appropriate weights. One of the identified goals, post-transplant survival, does not currently have any attributes due to a lack of available reliable models to include in organ allocation. However, a new model is currently being researched and developed that the Committee thinks has potential for inclusion in continuous distribution. The Committee had record participation in the VPE and is reviewing the results to analyze trends across and within demographic groups.

There are a few areas that the Committee is seeking Ethics input on, namely, geographic equity and estimated post-transplant survival.

The Committee had extensive deliberations about a post-transplant survival attribute. At the time, there were no existing models that were readily available to incorporate into the allocation system.

The following are relevant considerations relating to utility:

- Committee examined models aimed at predicting longer term post-transplant survival (utility)
- Existing models have only moderate predictive ability and not consistently reliable
- Could potentially disadvantage certain groups (older, sicker candidates)

The following are relevant considerations relating to futility:

- Categorize candidates based on clinical factors predicting the likelihood of survival in the short term (60-90 days) post-transplant
- Programs are unlikely to pursue futile transplants, as the SRTR monitors transplant programs based on post-transplant outcomes
- Candidate's clinical team is more likely to understand the candidate's likelihood of a futile transplant than a formula-driven policy

Also, the Committee has previously discussed and identified incorporating an attribute related to population density or supply and demand into the continuous distribution of livers. The Committee has determined the term "geographic equity" better addresses the purpose of the attribute under the goal of patient access. The system must balance geographic equity and efficiency. Next steps for this conversation include determining the specific outcome of interest (what does geographic equity look like under continuous distribution of livers?), determining which model aligns with this, defining the supply and demand, and considering overlap and interaction between geographic equity and placement efficiency attributes.

Summary of discussion:

A member asked if the travel discussed in the presentation was referring to organ travel, and asked if offers from their home state of Hawaii will look different in continuous distribution. The Committee is considering adding population density into continuous distribution to help account for candidates in Hawaii, Alaska, and Puerto Rico. A member asked how unintended consequences on equity will be measured in continuous distribution. Staff answered that there will be tools to analyze this, such as interactive dashboards, as well as the normal metrics to assess policies and additional statistical modeling efforts.

The Chair explained that adding some of these additional attributes may have an unclear impact on equity, and mentioned a concern about the introduction of post-transplant survival and implications for access. Also, the Chair expressed that the living donor population has different racial, ethnic, and socioeconomic realities that are different from the general population of candidates in need of a transplant, and asked how the Committee can be shown, and understand, these tradeoffs and begin to

articulate them. Staff answered that one way the Committee can look at this is through tradeoff curves as developed by the Massachusetts Institute of Technology (MIT). Staff also noted that for small populations with specific considerations such as living donor, input from the community and from other OPTN Committees, such as Ethics, is particularly helpful. A member asked if the prior living donor attribute applies to only prior liver donors, or for all organs. Staff answered that the priority would apply for all prior living donors, regardless of which organ was donated. Another member asked about the recent concerns from some prior living donors about the transition to continuous distribution and the possibility of losing some priority, and staff affirmed that the Committees developing continuous distribution recognize the importance of living donors and the responsibility to honor their gift. For example, the OPTN Kidney Transplantation Committee intends to maintain the same amount of priority for prior living donors in continuous distribution as in the current allocation system. In lung continuous distribution, prior living donors receive a point bump that puts them very high on the match run.

The Vice Chair asked if the VPE yielded any surprising insights or posed looming questions for the Committee to consider. Staff answered that the input from living donors was useful and helpful for the Committee to consider and that the input from participants on post-transplant survival was also useful to the Committee and that this yielded helpful information for development of the Heart VPE, when the OPTN Heart Transplantation Committee reaches that point.

6. Closing Remarks

The Chair, Vice Chair, and staff thanked members for their participation and attendance.

Upcoming Meetings

- April 20, 2023
- May 18, 2023
- June 15, 2023

Attendance

- Committee Members
 - o Andrew Flescher
 - Bob Truog
 - Carrie Thiessen
 - o Erica Stohs
 - o Glenn Cohen
 - o George Bayliss
 - o Keren Ladin
 - o Laurel Avery
 - o Sanjay Kulkarni
 - o Melissa Anderson
 - o David Bearl
 - o Ehab Saad
 - Felicia Wells-Williams
 - o Sena Wilson Sheehan
- HRSA Representatives
 - o Jim Bowman
- SRTR Staff
 - o Caitlyn Nystedt
- UNOS Staff
 - o Cole Fox
 - o Kim Uccellini
 - o Kristina Hogan
 - Rebecca Murdock
 - o Kieran McMahon
 - o Stryker-Ann Vosteen
 - o Laura Schmitt
 - o James Alcorn
 - o Delaney Nilles
 - o Krissy Laurie
 - o Lindsay Larkin
 - o Matt Cafarella
 - o Morgan Jupe
 - o Roger Brown