

**OPTN Membership and Professional Standards Committee  
Performance Monitoring Enhancement Subcommittee  
Meeting Summary  
April 13, 2021  
Conference Call**

**Richard Formica, M.D., Chair**

## **Introduction**

The Performance Monitoring Enhancement Subcommittee of the Membership and Professionals Standards Committee (MPSC) met via Citrix GoToTraining teleconference on April 13, 2021, to discuss the following agenda items:

1. Welcome and Agenda
2. Setting parameters for creation of optimal boundaries
3. Wrap Up

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

### **1. Welcome and Agenda**

The Chair of the MPSC Performance Monitoring Enhancement Project gave an opening statement and explained the meeting's objectives. He reminded the Subcommittee that the Committee had previously decided to use already established measures in the scorecard. He also commented on the importance of having flagging boundaries, and stated that having no flagging would not be practical for the work of the MPSC. The Subcommittee Chair and the SRTR Director also welcomed any feedback from the Subcommittee on improving the current risk-adjustment models.

### **2. Setting Parameters for Creation of Optimal Boundaries**

A staff member presented a slide deck that focused on setting parameters for creation of optimal boundaries. She explained that the Subcommittee had previously expressed an interest in a new approach to determine the optimal boundary criteria. The Subcommittee will provide guidance on the parameters that the SRTR will use to perform an analysis to identify optimal potential boundaries for all four metrics for the Subcommittee to consider. The staff member stated that the Subcommittee would need to determine whether post-transplant boundaries should be set for both graft and patient survival or just one, how many total flags the system should identify, and how the flags should be distributed among the metrics for the SRTR to develop potential boundaries. If time permits, the Subcommittee would also discuss how the system should evaluate pediatric components.

- ***Should post-transplant boundaries evaluate both graft and patient survival, just graft survival, or just patient survival?***

Staff provided a summary of the comments received through the Committee Management system on this topic, important considerations for decision, and data on the distribution of flags between graft and patient survival, graft only survival, and patient only survival for each organ type over the last four reporting cycles.

Subcommittee members agreed that graft survival is an important metric to monitor from an MPSC standpoint. The Subcommittee Chair mentioned that the Subcommittee should consider how the MPSC could best perform its responsibilities while considering this question. SRTR staff expressed concerns with monitoring just patient survival, stating that graft survival is an all-cause failure rate and has a stronger statistical power than patient survival. Graft survival includes graft losses and patient deaths (including deaths with a functioning graft). Re-transplants are also included in the cohort for graft survival but are excluded from patient survival. He mentioned a potential downside to only looking at graft survival, which is that patient survival continues to look for patient death beyond graft loss for up to a year. If the Subcommittee wants to choose only one, graft survival is the more inclusive of the two metrics.

The Subcommittee, and other MPSC members, participated in a poll to gauge support for monitoring graft survival only, patient survival only, or both patient and graft survival. The majority of the participants, 73%, supported monitoring graft survival only. Twenty-seven percent of participants supported monitoring both patient/graft survival, and no participants supported monitoring patient survival only.

A subcommittee member requested that the rationale for monitoring only graft survival and not patient survival be explicitly stated noting that the rationale would be important to communicate to the community during public comment. Summarizing the discussion, the Subcommittee chair stated that as we are rolling out a more complex system with multiple metrics, there is value in simplifying the metrics and making the metrics easier for the community to understand. He also mentioned that graft loss primarily captures everything from a patient safety perspective including both graft loss and patient death. The one blind spot as described by the SRTR Director is relatively minor.

- ***How many total flags should the system identify, for all four metrics and all four organs and how should the number of flags be distributed across each of the four metrics?***

A staff member explained that the Subcommittee would determine the total number of flags for adult components including all organs and all metrics and would determine the distribution between the four metrics (waitlist mortality, offer acceptance, 90-day survival, 1-year conditional survival). The Subcommittee considered these two questions together. The Subcommittee Chair reminded the Subcommittee of the MPSC's role to engage with programs and noted that the monitoring flags would be distributed over pre-transplant and post-transplant so moving some monitoring activity to the pre-transplant side would result in decreased emphasis on post-transplant outcomes. The Subcommittee reviewed data that showed the total number of adult flags for the last four reporting cycles for all organ types. A staff member summarized the comments received through Committee Management regarding the number of overall flags and the distribution of flags.

A subcommittee member inquired whether operational rules could be used for the red and yellow zones that could easily be revised or whether the boundaries needed to be included in bylaws. A staff member responded that the red zone would need to be included in the bylaws because programs would be required to interact with the MPSC. If the boundaries were changed for the red zone, the change would need to go through the public comment process. Staff also responded that the yellow zone is operational and would not need to be included in the bylaws since programs would not be required to interact with the MPSC, rather programs would be offered assistance.

Some subcommittee members supported having equally weighted distribution between pre- and post-transplant flags. One subcommittee member mentioned that offer acceptance is becoming more problematic in the thoracic arena because ex vivo perfusion (EVP) is causing programs to receive offers from much further away. He inquired as to whether there could be cutoffs based on sequence number. He suggested splitting the flags 50% 1-year post-transplant and 50% for waitlist mortality for thoracic. The SRTR Director explained that if you consider an offer that occurs later in the sequence of the match run, it would not be counted if no one below the offer accepts and transplants the organ. In addition, the offer acceptance model makes adjustments for the distance in kilometers from the OPO to the transplant hospital and makes adjustments for the offer sequence number. As the offer sequence number increases, the odds in the model that an offer would be accepted also goes down. Another subcommittee member expressed concerns that surgical staff in transplant programs, particularly larger programs, are often fielding many organ offers simultaneously for multiple patients so offers are declined. In addition, some programs place sicker patients on the waiting list and perform higher risk transplants. The Subcommittee chair responded that if the practice at your program were similar to the practice at other programs, your program would not look worse because the other programs face the same challenges. Overall, when looking at the larger system, programs that are transplanting complex patients are not going to be hurt in this system. The review boundaries will identify programs that are truly falling outside the accepted bounds of practice.

Other subcommittee members suggested more weight be allocated to the post-transplant metrics. One subcommittee member noted that because the pre-transplant metrics are new, they should be introduced gradually since there will be a great degree of angst about the flagging system for the new metrics and it might be better to initially weigh the metrics that are less familiar lower. He noted that he might turn down a higher risk kidney for patients higher on the match run but accept for someone lower. This will make a program's pre-transplant metrics appear worse but ultimately results in a transplant. The SRTR Director noted that, in this case, if your program is considering and accepting offers in a similar way to other programs, your program would appear average in the organ acceptance metric. The Subcommittee Chair suggested that the Committee could consider using a process similar to the living donor follow-up roll out, where we have a phased in roll out of the new metrics with implementation of the MPSC interventions set for a future date.

Another subcommittee member suggested a split of 70% for post-transplant and 30% for pre-transplant based on concerns about the level of control programs have over the factors that affect the metrics. He expressed concern about the ability to reflect the competitiveness in a

local geographic area. He also noted that the committee needs to be careful not to disincentivize the listing of sick patients through use of waitlist mortality. Finally, he asked about whether the length of time on the waiting list is factored into the waitlist mortality rate and if an organ that is accepted on EVLP but not transplanted is included as a decline in the program's offer acceptance rate. The SRTR Director responded that the waitlist mortality model is a period prevalent model, meaning that the model evaluates the patients that are on a program's waiting list over a two-year calendar evaluation window. The model makes adjustments for the patient's acuity at the time the patient is listed and the length of time the patient has been listed at the start of the evaluation window. If a program accepts an EVLP organ but does not transplant the organ, the program is not credited with an acceptance and the offer does not get included in the evaluation for any program if the organ is not transplanted.

In response to a question regarding assigning a certain number of flags to each organ and each metric for that organ, the SRTR responded that it would be easier to look for the same boundaries across all of the organ types initially. If the Subcommittee provides a very granular division of the flags between organ and metric, the analysis becomes more susceptible to random variation in any dataset for one 6-month evaluation. The extent to which the Subcommittee can standardize its data request across all organs as a first pass, the less the potential boundaries will be affected by idiosyncratic variation in one 6-month dataset. The Subcommittee can then review the results of the analysis and refine the distribution, if needed.

The Subcommittee participated in a poll to gauge support for keeping the same number of flags that would be distributed across all four metrics and all organs. Sixty-seven percent supported keeping the same number of flags and 33% opposed.

The Subcommittee participated in another poll to estimate support for distribution of flags for pre and post-transplant. Fifty-nine percent of participants supported equal distribution (50-50 split) between pre- and post-transplant.

The Subcommittee chair, noting that the vote was close, asked whether the Subcommittee would agree to a 50-50 split between pre- and post-transplant so the SRTR can provide data that is real versus theoretical for the Subcommittee to evaluate. The Subcommittee could then evaluate the results of the analysis and refine the distribution if necessary.

A subcommittee member asked for clarification as to whether there can be different distributions for different organs, noting that a 50/50 split for kidney is problematic, in particular. A SRTR staff member explained that a request for a 50/50 split of flags between pre- and post-transplant does not mean that it will result in a 50/50 split between pre- and post-transplant for every organ. The total of all flags for all organs will be split 50/50 between pre- and post-transplant. Therefore, for example, you could end up with a system that has zero flags for waitlist mortality for kidney. In a further example, the SRTR staff member stated that if there was more variability between kidney programs for offer acceptance than in other organs, then the bulk of the flags attributed to offer acceptance would be kidney programs. The SRTR Director further noted that if the Subcommittee can give general guidance on the split, the SRTR can provide data on where the boundaries would be to achieve that split and then the Subcommittee can review how that affects each organ group specifically and make

adjustments, if necessary. The MPSC should focus its efforts where the more extreme variations exist and where improvement can be made. If the MPSC is interested in limiting the number of reviews, the reviews should be concentrated where there is the most variation from the average for a metric rather than setting a certain number of flags for each organ.

It was also noted that the transplant community has been highly critical of using solely post-transplant metrics to evaluate programs. The community has been requesting that pre-transplant metrics be included in the evaluations to reflect all aspects of care provided by transplant programs and to decrease the emphasis on post-transplant outcomes, which then allows programs to be more comfortable performing higher risk transplants.

One subcommittee member noted that he still felt that the larger percentage should be on post-transplant rather than pre-transplant initially since programs do not have experience with evaluation for pre-transplant metrics.

A subcommittee member asked whether staff had determined what an inquiry would look like for a program that was flagged for low offer acceptance. The amount of effort required to respond to an inquiry for these new metrics is a factor in this determination. Staff have not yet developed the inquiry, and the MPSC will provide guidance to staff on what the inquiry will include. Additionally, a SRTR staff member noted that the SRTR and UNOS could provide programs with data through SRTR reports and the UNet portal data that can help programs determine what the program can do to improve. The Subcommittee Chair mentioned that the new metrics could be phased in over time so programs could get used to them.

The Subcommittee agreed to request data based on a 50-50 distribution for pre-transplant and post-transplant. The Subcommittee can look at the information about the programs that would be identified, and then evaluate any changes based on a review of actual data.

- ***How should the system evaluate pediatric components?***

The Subcommittee Chair provided a brief review of pediatric components, and highlighted a graph that showed the incidence of pediatric recipient deaths during the first year for each organ type from 2014 - 2019. He also reported that pediatric programs tend to be smaller volume programs, and stated that the new metrics may not capture different subtleties of pediatric transplant.

The SRTR Director noted there are currently separate metrics for pediatric and adult post-transplant outcomes. He asked the Subcommittee about their comfort level in taking a similar approach to identifying underperforming pediatric programs as adult programs. An SRTR staff member mentioned that it might be important to look at a program's acceptance and decline patterns in conjunction with waitlist mortality for pediatric outcomes.

The MPSC Vice Chair stated that pediatric programs should not be singled out but should be consistent across adult and pediatric programs. He also stated that the issue with pediatric programs is related to the proportion of pediatric components that are small volume, which is the same for smaller volume adult programs.

Another subcommittee member stated that he would be reluctant to review all pediatric deaths.

### **3. Wrap Up**

Staff stated that the Subcommittee would continue the discussion on pediatric components during the next meeting. She also stated that she would follow up with SRTR about the timing of the development of the analysis to be presented at the next subcommittee meeting. Staff concluded the presentation and the Subcommittee had no other questions or comments.

#### **Upcoming meetings**

April 22, 1 – 3:00 pm EDT - MPSC meeting

April 27, 3 – 5:00 pm EDT - Performance Monitoring Enhancement Subcommittee meeting

May 7, 2 – 4:00 pm EDT – Performance Monitoring Enhancement Subcommittee meeting

May 21, 4 – 6:00 pm EDT-Performance Monitoring Enhancement Subcommittee meeting

May 25, 2 – 4:00 pm EDT MPSC meeting

June 11, 2 – 4:00 pm EDT Performance Monitoring Enhancement Subcommittee meeting

June 24, 1 – 3:00 pm EDT -MPSC meeting

## Attendance

- **Committee Members**
  - Richard N. Formica Jr (Subcommittee Chair)
  - Sanjeev K. Akkina
  - Nicole Berry
  - Matthew Cooper
  - Adam M. Frank
  - Catherine T. Frenette
  - Michael D. Gautreaux
  - Alice L. Gray
  - John R. Gutowski
  - Ian R. Jamieson
  - Christy M. Keahey
  - Mary T. Killackey
  - Heung Bae Kim
  - Jon A. Kobashigawa
  - Jules Lin
  - Didier A. Mandelbrot
  - Virginia(Ginny) T. McBride
  - Willscott E. Naugler
  - Matthew J. O'Connor
  - Jennifer K. Prinz
  - Lisa M. Stocks
- **Other MPSC Members**
  - Theresa Daly
  - Maryjane Farr
  - Anne Krueger
  - Clifford Miles
  - Nicole Pilch
  - Zoe Stewart-Lewis
  - Gebhard Wagener
  - Parsia Vagefi
- **HRSA Representatives**
  - Marilyn Levi
- **SRTR Staff**
  - Ryo Hirose
  - Nicholas Salkowski
  - Jon J. Snyder
  - Bryn Thompson

- **UNOS Staff**

- Sally Aungier
- Nicole Benjamin
- Tameka Bland
- Robyn DiSalvo
- Nadine Drumn
- Amanda Gurin
- Danielle Hawkins
- Ann-Marie Leary
- Amy Minkler
- Jacqui O'Keefe
- Liz Robbins-Callahan
- Sharon Shepherd
- Leah Slife
- Stephon Thelwell
- Gabe Vece
- Betsy Warnick

- **Other Attendees**

None