Transplant Program Work Group
OPTN/UNOS Ad Hoc Systems Performance Committee
Meeting Minutes
Conference Call
01/15/2019

Introduction

The Transplant Program Work Group met via Citrix GoTo #894-245-756 teleconference on 01/15/2019 to discuss the following agenda items:

1. Gather Additional Feedback
2. Next Steps

The following is a summary of the Work Group's discussions.

1. Gather Additional Feedback

Summary of discussion

If a transplant program submits this balanced scorecard to help with the measurement of their program, they should be able to explain how they measure it in a way that is agreed to.

On the feedback spreadsheet, one key driver category is the dashboard with regard to self-monitoring, and figuring out what specific measures will allow for reaching the desired outcomes of increased acceptance and decrease in decline rate, etc. Previous discussions at the Chicago meeting were around trying to improve interaction with the OPOs and decreasing the gap between transplant center and OPO.

Additional potential measures include bedside liver biopsies for specific donors that might have high-risk graft, trying to improve the ability for surgeons to accept the appropriate donor for the right recipient, as well as distance and time affecting cold ischemic times. The new liver allocation will increase cold ischemic time and transportation of the organs.

The Work Group Co-Chair has thought about the predictive analytics in terms of donor recipient matching, and what tools UNOS can provide at the transplant center that will allow them to predict success/long-term function of an organ in a recipient and improve relationships with OPOs. For liver, MELD is used for survival benefit, but it will be important to determine predictive analytics and getting to the point of helping surgeons identify variables in accepting a marginal/suboptimal kidney in a recipient.

The next recommendation on the spreadsheet is image sharing and a possible mechanism to see images (biopsies or CP images) on DonorNet to facilitate organ acceptance rates for transplant surgeons for kidney and liver. The Work Group Co-Chair commented he is unsure of the practicality of image sharing for the near future. They are tasked with identifying measures for the short term, but he feels it important to look at the longer-term/big picture ideas as well.

Live streaming capability was also discussed in the past, as well as optimizing OPTN and non-OPTN data research tools to educate transplant professionals at the institution and also the OPO.

One Committee member had a question about the predictive analytics. If they are trying to measure life years with a transplanted organ that assumes tracking of survival rates long enough to incorporate that data into a predictive model, but that data is not available at this time. UNOS staff clarified that that data is collected. The candidate is followed until death or loss

to followup. TIEDI forms are filled out for a long time, but the recipient has to survive that long and they have to have been transplanted that far out.

Another comment was that it would be nice to see predictive analytics in organs other than kidneys where they don't have those sorts of measures to match. Other data would be needed to compare life years with and without the organ.

One Systems Dynamics Work Group member has published some data in the liver world. The lung allocation score includes a 1-year transplant benefit estimate, so that could be used in that setting. UNOS may not have access to the tools, but the possibilities are out there.

SRTR staff member confirmed has been doing work with UNOS in predictive analytics models for the last few years. The ATC presented some work and there was a whole session at the recent Alliance Critical Issues Forum in Pittsburgh on predictive analytics. For example, SRTR is developing an analytics tool that takes the donor and recipient characteristics and provides to predictive outcomes for both whether the organ was accepted or declined. The tool allows entry of restrictions, such as restricting to a KDPI of 50 or less kidney. With those criteria, the tool then gives the likely outcomes of that patient for the next 3 years or so. The idea of incorporating predictive analytics right into DonorNet is being tested right now to see if it is possible so that when offers are being made, some of the statistics could be provided. Then they could determine whether that would be helpful or harmful to the decision-making process.

The OPO Work Group has also been discussing how some type of predictive analytic model might eliminate the need for expedited placement process on the difficult-to-place organs. There are tools available now; they just need to figure out how to get them out there.

One Committee member asked if there are any gaps in types of data needed and those that are being currently collected. SRTR staff confirmed they are limited to data currently being collected through DonorNet or candidate record on the waitlist. Those types of issues need to be brought to the Data Advisory Committee or the organ-specific Committees to make those recommendations. There are test tools that were made available during the Alliance Critical Issues Forum so people could log into them and play with them. These could be made available again to this Committee.

One question was whether there needs to be a column on the spreadsheet for actions that need to be taken to put each proposal into effect. It might be a matter of gathering data already available, but in other cases more data may be needed. One issue might be with patients with cardiac disease because cardiac disease is not tracked at all. However, transplant centers realize there's a severity of cardiac disease and the potential long-term impact of that, so they might come together to figure out what variables need to be tracked, such as degree of cardiac disease.

Another member agreed with the above comment and remembered an initiative from 8-10 years ago to collect ejection fractions on candidates, which was not well received. Simple things that could be gained from the medical record during evaluation (cardiac history such stents, CABG, etc) might be more amenable to collection, rather than specifically requiring collecting ejection fraction on candidates.

One Committee member commented that about 10-15 years ago when the Data Advisory Committee first came about, there were conversations about whether in order to do predictive analytics they needed data from the whole OPTN data set or whether data could be obtained from a subset of patients and still get the same result. He questioned whether SRTR discussed doing something like this in the future. SRTR staff clarified that if there was a pilot project, they would need those data elements collected for each candidate for the models to be most

effective. If a program had an element missing, there are ways that the analytic models can handle missing elements.

It may be useful to add this to the recommendations as how to expand the data collection needed to make robust predictive analytics beyond what is being collected for the purposes of OPTN policy. Ultimately, the clinicians would need to come up with variables not currently collected that would be important for patient outcomes. Then a pilot set could be run to collect data on those variables and see if they really do improve the prediction. If not, then they will have to ask if they should still go after those particular variables.

Next Steps and March Meeting Info

Summary of discussion

Next steps will be to gather all the data from the different Work Groups and see what measures they came up with. Internal staff will evaluate the feedback and determine what is already out there, what has been done, and what is possibly coming down the pipe. There are tools that are out currently out there, but they need to do a better job with getting those out there for members to use. Staff will determine what is feasible, what is not, what further information/metrics are needed.

2. Next Steps

UNOS is asking all the Work Groups to finalize their document and put their best efforts towards those measures. This will be important to help determine what needs to be captured from the Transplant Work Group side. Staff will then consolidate all three Work Groups and have an internal meeting to develop their own rubric of feasibility, what has been done, and what is planned for the future. All this will be discussed at the 02/08/2019 call in preparation for the March in-person meeting.

The Work Group Co-Chair asked all Work Group members to add at least one thing to the spreadsheet or help define at least one thing.

The Committee Co-Chair also thanked everyone for their work on this project thus far.