

OPTN Membership and Professional Standards Committee Report to the Board of Directors

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The OPTN Membership and Professional Standards Committee (MPSC) is pleased to provide this report to the OPTN Board of Directors. This report reflects the MPSC's work from December 2022 – May 2023 and summarizes the Committee's project work, recommendations for system improvements, and efforts to increase transparency about MPSC activities. The report also includes updates on staff-led initiatives to support OPTN monitoring activities and quality improvement efforts.

Updates on Current Committee Projects

Transplant Program Performance Metrics Enhancements

In December 2021, the Board of Directors approved a proposal to enhance the transplant program performance monitoring system. ¹ The new monitoring system involves four risk-adjusted measures related to the patient journey through the transplant process. The table below outlines the four new metrics and the implementation date associated with each metric.

Metric	Implementation
90-day graft survival hazard ratio	July 2022
1-year conditional on 90-day graft survival hazard ratio	July 2022
Offer acceptance rate ratio	July 2023
Pre-transplant mortality rate ratio	July 2024

Preparing for Offer Acceptance and Pre-Transplant Mortality Implementation

In preparation for the offer acceptance rate ratio metric implementation in July 2023, staff developed a collaborative improvement project to share effective offer acceptance practices and help transplant programs utilize improvement activities to increase their offer acceptance rates. The collaborative launched in January 2023 with a kick-off conference, includes six months of active engagement, and participation will conclude July 2023. The collaborative cohort is the largest OPTN collaborative to date and includes 83 transplant programs from across the nation; 49 kidney, 17 heart, 12 liver, and 5 lung programs. While not every transplant program in the country is participating in the collaborative, the kick-off event, which included education from the MPSC and Scientific Registry of Transplant Recipients (SRTR) on the new metric as well as effective practices, was made available virtually to all. Recordings of

¹ https://optn.transplant.hrsa.gov/media/hgkksfuu/phase-1_tx-prgm-performance-monitoring_dec-2021.pdf

the virtual sessions are available in the OPTN Learning Management System (known as UNOS Connect). Throughout the project, staff have provided the MPSC with updates and shared resources, effective practices, and feedback from the community. The <u>toolkit</u>² on the OPTN website was also updated with offer acceptance rate ratio resources. Staff will continue to partner with the MPSC to make offer acceptance tools and resources available for the entire donation and transplant community during and after the collaborative.

Over the last six months, the MPSC has also developed the process the Committee will use to review transplant programs identified under the offer acceptance rate ratio criteria. In April, the MPSC approved the initial inquiry and questionnaire the Committee will send to members identified for review. The initial inquiry will include information on the OPTN data resources available to programs to evaluate their offer acceptance practices and will offer the programs the opportunity to set up an educational session with staff to review these tools.

At its upcoming meeting in July 2023, the MPSC will also discuss similar plans to prepare the community for implementation of the pre-transplant waitlist mortality metric through appropriate educational initiatives and development of the MPSC's review process for members identified for review.

Evaluation

To evaluate the impact of the new monitoring system, the Committee proposes to statistically examine approximately 125 different primary outcomes. Analysis of each metric is broken down into subgroups based on variables intended to capture risk-influencing patient or donor features, as well as key indicators of socioeconomic status and equity groups. Evaluation of the metrics will focus on trends in deceased donor utilization rates, rates of new waitlist additions, offer acceptance rates, pre-transplant mortality rates, and post-transplant mortality rates. The next evaluation report on these metrics will be provided to the MPSC at its October 2023 meeting.

The MPSC continues to evaluate the number of programs identified for review and qualitative insights from individual program interactions. During the MPSC's February 2023 meeting, the MPSC reviewed the data contained in Table 2 and 3 on the number of adult and pediatric flags under the recently implemented post-transplant metrics, and the number of flags for the pre-transplant metrics, if those metrics had been implemented.

Table 2: Number of Adult Flags for New Performance Metrics in the January 2023 Program Specific Reports

	•	Post-Transplant trics	•	emented Pre- nt Metrics	Total
	90-day graft survival	1-year conditional graft survival	Offer Pre-transplant acceptance mortality rate rate ratio ratio		
Heart	6	5	5	5	21

² https://optn.transplant.hrsa.gov/policies-bylaws/enhance-transplant-program-performance-monitoring/

Kidney	7	7	13	0	27
Liver	4	0	8	4	16
Lung	3	2	1	3	9
Pancreas	1	0	0	0	1
Total	21	14	27	12	74

Table 3: Number of Pediatric Flags for New Performance Metrics in the January 2023 Program
Specific Reports

	•	Post-Transplant trics	Not Yet Imple Transplar	Total	
	90-day graft survival	1-year conditional graft survival	Offer acceptance rate ratio	Pre-transplant mortality rate ratio	
Heart	2	3	2	4	11
Kidney	5	1	3	1	10
Liver	3	0	3	2	8
Lung	1	0	1	0	2
Pancreas	0	0	0	0	0
Total	11	4	9	7	31

When setting the thresholds, the MPSC paid close attention to the number of programs that would potentially be identified for review. The Committee acknowledged commonly cited criticism of the previous performance monitoring system: that fear of being identified for review dis-incentivized transplant programs' utilization of marginal and high-risk organs. The new post-transplant outcomes thresholds were designed to continue to identify transplant programs that are clinically meaningful outliers and that may present a risk to patient health and public safety but would likely not identify as many programs as the previous thresholds. The number of programs identified for post-transplant reviews remains stable and represents about half of the number of programs identified for post-transplant reviews under the previous performance monitoring system. The MPSC will identify additional programs for review as the new pre-transplant metrics are implemented.

The MPSC has also discussed the benefit of studying carve-outs or different metrics for hard-to-place organs to try to increase utilization. As noted throughout the MPSC's development of the transplant program performance measures project³, the community could benefit from ongoing education about how risk-adjustment models benefit programs that utilize marginal or typically hard-to-place organs and/or transplant recipients that are considered high risk for a variety of clinical reasons. The MPSC plans to incorporate evaluation of suggested carve-outs and to publish information on the factors that most often contribute to programs being identified for MPSC performance review into the Committee's

³ Briefing to the OPTN Board of Directors on Enhance Transplant Program Performance Monitoring System, December 2021. https://optn.transplant.hrsa.gov/media/yctffgt2/20211206-bp-mpsc-enhnc-tx-prgrm-prfrmnc-mntrng-syst.pdf

evaluation of the new transplant program performance monitoring system. The MPSC has requested aggregate data from the SRTR on the characteristics of programs that are identified for 90-day and 1-year conditional on 90-day graft survival. The SRTR plans to provide this data for consideration by the MPSC at its July meeting. In addition, the OPTN is creating a dashboard that will be made available to transplant programs in the Data Resources portal in the OPTN Computer System (UNet) following incorporation of the July SRTR program specific report data. The OPTN dashboard will provide hazard ratio data for each characteristic included in the SRTR risk adjustment model for the program's transplant recipients.

OPO Performance Monitoring Enhancements

The MPSC has spent considerable time discussing the scope and goals of this project, paying particular attention to OPTN authority, the recommendations of the OPTN Ad Hoc Systems Performance Committee, relevant portions of the OPTN Strategic Plan, and the current state of OPO performance monitoring. The MPSC also received updates from the SRTR on existing OPO metrics and data collection activities. The MPSC endorsed many principles used in the Transplant Program Performance Monitoring Enhancement project to guide evaluation of potential OPO metrics. The selected principles state the MPSC should use metrics that:

- measure activities that are clearly within OPTN authority,
- the member can impact,
- the member is responsible for,
- have a clearly desired outcome,
- are risk adjusted, and
- incentivize behavior that will increase transplantation.

Additionally, the MPSC supported consideration of additional data collection and development of new metrics that would comply with these principles and meet the needs of the OPTN.

During the MPSC meeting on May 4, 2023, representatives from the Centers for Medicare and Medicaid Services (CMS) provided an overview of CMS' oversight of OPOs; the new CMS OPO outcome measures, including information on the data CMS uses for the outcome measures and how it is obtained and analyzed; and an update on the implementation process, particularly for OPOs that fall within Tier 2 and Tier 3 during the interim assessment years and the recertification cycle. Based on its discussions, the MPSC agreed that any revisions to OPTN OPO performance monitoring activities should not duplicate the CMS system but at the very least should complement the CMS metrics.

At the same meeting, the MPSC participated in break out exercises to discuss the characteristics that differentiate OPOs that perform well from OPOs that do not perform well. Consistent themes from those break out discussions included:

- Adequate resources and training,
- Effective relationship building and communication, especially with donor hospitals and transplant programs.

⁴ MPSC Meeting Summary, May 4, 2023. https://optn.transplant.hrsa.gov/media/d5sf1py4/20230504_mpsc_meeting_minutes_public.pdf.

 Effective data-driven, quality improvement systems to continuously improve all aspects of OPO performance and processes.

The MPSC also discussed parts of the donation process with wide variation in OPO practice and identified:

- Referral definitions and response rates,
- Authorization,
- Family approaches,
- Donor management practices and case times,
- Allocation practices, particularly those involving donation after cardiac death, normothermic regional perfusion, mechanical perfusion devices, and medically complex donors, and attempts to obtain back ups and reallocate organs,
- Communication and collaboration with donor hospitals and transplant programs, and
- Use of donor recovery centers.

The MPSC acknowledged the important role donor hospitals play and the need for donor hospital accountability in terms of timely referrals, referral rates, clinical support of patient, and planned donation conversations, and suggested holding transplant hospitals accountable for those elements and/or creating incentives for donor hospitals.

The MPSC also acknowledged the critical role transplant programs play in these processes and the challenges often caused by transplant program acceptance practices including late declines, consistently turning down offers, and differing expectations regarding communication, donor management and testing, procurement arrangements, etc.

Lastly, the MPSC discussed opportunities for increased data to help better understand OPO behavior and evaluate performance, including:

- Standardized definition of cause of death
- Response to referral
- Number of donation conversations
- Authorization rate
- Allocated organs or attempted allocations
- Stand-alone conversion rate for registered donors
- Granular level data on why organs were not allocated
- Reason and timing of late declines by transplant programs
- Redundant and back-up allocation efforts

A key theme raised in different MPSC discussions is the importance of consistency, which can improve understanding, accuracy and timeliness during complex situations and help avoid conflict and potential safety issues. Extreme variation in practice also makes data collection more difficult. For these reasons, the MPSC strongly encourages the OPTN to streamline deceased organ donor assessments, which was recommended within the NASEM report, and other OPO practices where wide variation exists.

Allocations Subcommittee

Last year, the MPSC observed a significant increase in the number of allocations out of sequence identified for MPSC review and created a subcommittee to try to better understand the reason for the increase and identify activities to reduce the number of allocations out of sequence.

The MPSC reviews allocations out of sequence during its in-person meetings three times each year. At each meeting the MPSC reviews a certain number of OPOs and will review all allocation issues for each OPO that have been compiled over a one-year period. Table 5 below shows, on average, the number of total allocation cases reviewed at each in person MPSC meeting in 2017-2019, and the actual number of allocation deviations reviewed by the MPSC at the last four in person meetings. (The MPSC changed its review processes during the COVID pandemic and numbers associated with reviews during that time are excluded.)

Table 4: Individual Allocation Deviations Reviewed by MPSC

MPSC Review Period	Allocation Deviations
2017 (average per 3 meeting cycles)	125
2018 (average per 3 meeting cycles)	150
2019 (average per 3 meeting cycles)	125
February 2020 Meeting	166
July 2022 Meeting	500
October 2022 Meeting	820
February 2023 Meeting	758

In almost all instances, the Committee determined that OPOs were making reasonable efforts to allocate organs that were hard to place. Examples of challenges faced by these OPOs include increasing cold ischemic time (CIT), late declines by accepting transplant programs, and logistical challenges such as the timing of that day's last commercial flight out of the local airport.

The MPSC formed a subcommittee to further analyze data, particularly to evaluate whether any patterns or trends of these allocations out of sequence suggest OPOs were inappropriately prioritizing transplant hospitals within a close proximity to the OPO's donation service area. It is important to note the MPSC's work so far has not revealed any evidence of such activity. Most often, OPOs seem to allocate hard-to-place organs out of sequence to transplant programs with high utilization of similar organs. The MPSC is concerned that one unintended consequence of allocations out of sequence, which seem appropriate to increase utilization of organs, may be creating the perception of greater inequities in access to transplantation. The MPSC is also concerned that, as OPOs develop their own protocols and allocate out of sequence at different times and using different parameters, confusion and conflict may increase between members. The MPSC feels strongly that OPTN allocation policies should include a framework or guidance to help OPOs allocate hard-to-place organs and promote consistency within the system. The MPSC also believes creating consistent processes for deceased donor evaluation and testing is important, and that doing so will have a positive impact on the ability to develop consistent allocation practices for hard-to-place organs.

Until such a framework exists within OPTN policies, the MPSC expects the number of allocations out of sequence it reviews to continue to increase. The MPSC is concerned about the MPSC's workload and the sustainability of the current process. The subcommittee continues to evaluate how to prioritize reviews to focus on the issues of greatest potential concern, and how the MPSC can improve its review processes to identify and assess those scenarios. The Committee plans to develop a process to further evaluate the impact of transplant programs' declines after acceptances, which may result in allocations out of sequence, and agreed to focus its initial review on kidney acceptances. The MPSC anticipates that it may need to discuss increased data collection for allocation activities to ensure the MPSC can appropriately review them. The Committee also plans to review SRTR data and risk adjustment on hard-to-place organs and consider whether to utilize some aspect of those criteria to indicate which allocation cases may not need to be reviewed by the MPSC.

More recently, the Committee focused its review on data to identify donor characteristics that would predict a higher likelihood that allocation out of sequence would be required to ensure that a kidney is utilized. Although some donor characteristics such as higher KDPI, DCD donors, increased age, presence of hypertension and certain causes of death appear to be more prevalent in donors whose kidneys were allocated out of sequence, there are a substantial number of donors with the same characteristics that are allocated in sequence and according to policy requirements. These findings emphasize that the circumstances leading to allocation out of sequence are multi-faceted and complex, supporting the need to incorporate a framework for allocation of harder-to-place organs in OPTN allocation policies and the need to increase data collection and revise programming to adequately monitor allocation activities.

The Committee has also begun to evaluate data regarding transplant programs' "late declines" after acceptance, which can result in allocations out of sequence. The MPSC's review has highlighted the need for a consistent definition of "late decline" and increased data collection and programming to ensure the MPSC can identify each instance when a transplant program's behaviors contribute to allocations out of sequence or potential non-use of an organ.

Require Reporting of Patient Safety Events Project

The MPSC began work on this project in February 2023. The purpose of this project is to align OPTN members' patient safety event reporting requirements with the OPTN contractor's requirement to notify HRSA and MPSC leadership of specific, concerning patient safety events within, typically, 24 hours after the event was voluntarily reported. The MPSC believes required reporting is essential to ensure the MPSC can review potential issues of concern and to allow staff to report events to HRSA as required by the OTPN contract.

The MPSC used the 2011 Wakefield Letter⁵ as the foundation for the types of events that should be included in the requirements. The Committee sought feedback from OPTN Operations and Safety Committee (OSC) leadership and the OPTN Living Donor Committee on additional concerning patient safety events that should be included as required patient safety reports.

The MPSC proposes adding the following patient safety events to OPTN Policy 18: Data Submission Requirements:

⁵ Wakefield, Mary K., Administrator, Department of Health and Human Services; Letter to Jack Lake, M.D., President, Organ Procurement and Transplantation Network, August 5, 2011.

- Transplant hospitals will be required to report the following events through the OPTN Improving Patient Safety Portal within 24 hours after the member becomes aware of the incident:
 - A transplant of the incorrect organ into an organ recipient occurs.
 - A transplant of an organ into the incorrect organ recipient occurs.
 - A donor organ is identified as incorrect during pre-transplant processes conducted according to either Policy 5.8.A: Pre-Transplant Verification Prior to Organ Receipt or Policy 5.8.B: Pre-Transplant Verification Upon Organ Receipt.
 - The potential transplant recipient is identified as incorrect during pre-transplant processes conducted according to either Policy 5.8.A: Pre-Transplant Verification Prior to Organ Receipt or Policy 5.8.B: Pre-Transplant Verification Upon Organ Receipt.
 - An organ was delivered to the incorrect transplant hospital and resulted in non-use of the organ.
 - The incorrect organ was delivered to the transplant hospital and resulted in non-use of the organ.
 - An organ did not arrive when expected and resulted in the intended candidate not receiving a transplant from the intended donor because of the transportation issue.
 - An ABO typing error or discrepancy is caught before or during pre-transplant processes conducted according to either Policy 5.8.A: Pre-Transplant Verification Prior to Organ Receipt or Policy 5.8.B: Pre-Transplant Verification Upon Organ Receipt
- OPOs will be required to report "an ABO typing error or discrepancy caught after the OPO's
 deceased donor blood type and subtype verification process, as outlined in Policy 2.6.C: Reporting
 of Deceased Donor Blood Type and Subtype" through the OPTN Improving Patient Safety Portal
 within 24 hours after becoming aware of the incident.
- All OPTN members will be required to report the following events through the OPTN Improving Patient Safety Portal within 24 hours after the member becomes aware of the incident:
 - Any sanction is taken by a state medical board or other professional body against a transplant professional working for an OPTN member.
 - Evidence is discovered of an attempt to deceive the OPTN or the Department of Health and Human Services (HHS)

Based on committee discussions and feedback from OSC leadership, the MPSC has decided to exclude two events from the Wakefield Letter as required reports in this project. The first is "[a]ny "Never Event", as included in the CMS policies for selected hospital-acquired conditions, in an OPTN member hospital that impacts transplant patients or living organ donors (including those under evaluation for living organ donation)." The MPSC and OSC leadership agreed that including this event in the project could create inefficiencies within the reporting system, since some "Never Events" do not relate to transplant, and cause confusion for members when reporting. The second excluded event is "[u]se of a device for a condition, diagnosis, or procedure that is contraindicated by the FDA." The MPSC believed this event to be too proscriptive and cited concerns with devices used for certain lung transplant patients, specifically metallic, self-expanding airway stents and uncovered airway stents, which are contraindicated by the FDA but are the most appropriate or only treatment for those patients.⁶

With a renewed external focus on the efficiency of the OPTN system, the MPSC supports including transportation events that result in non-utilization of the organ in this proposal. Non-utilization is a

⁶ MPSC Meeting Summary, April 24, 2023. https://optn.transplant.hrsa.gov/media/2qylxchl/20230424 mpsc meeting minutes public.pdf

patient safety event because a candidate who should have received a transplant did not. In fact, events that result in an intended recipient not receiving a transplant and then dying before they can get one is considered a "serious patient safety event." All three transportation events that are included in this proposal are required to be reported if the event results in non-utilization or the intended candidate did not receive a transplant from the intended donor. The events where an incorrect organ is delivered to the transplant hospital, or an organ is delivered to the incorrect transplant hospital were also included because these events could contribute to a transplant of the wrong organ.

The OPTN Living Donor Committee provided a suggestion to modify current required living donor event reports, also in OPTN Policy 18, to "any living donor added to the waiting list within two years after donation." The MPSC will include this suggested modification in this proposal.

The MPSC voted to submit this proposal for the Summer 2023 public comment cycle during its May 22nd meeting and will be asking for feedback regarding the following:

- The inclusion of the transportation events
- The "near miss" definition, since the MPSC considered multiple definitions.
- The timeframe for identifying ABO typing errors or discrepancies for transplant hospitals and OPOs.

Recommendations for Policy Improvements

The MPSC often hears about issues facing OPTN members in a confidential medical peer review setting, which sometimes inhibits the MPSC's ability to share lessons or opportunities for improvement with the broader transplant community. In order to assure the community that systemic issues identified in the peer review setting can be acted upon, the MPSC recently collaborated with the OPTN Policy Oversight Committee (POC) to implement a process for the MPSC to refer suggestions based on MPSC case reviews to OPTN committees and the POC for policy improvements. Relevant committees will have a designated amount of time to report back to the MPSC and POC on whether to act on the MPSC's recommendations, and staff will track the status of all referrals in a central location.

The first group of MPSC referrals to use this new process were sent to the policy-making committees and the POC on March 9, 2023. The referrals and progress to date are outlined below:

Standardize Reporting Information to Patient Safety Contacts

OPTN Policy 15.1 (Patient Safety Contact) requires each OPO and transplant program to identify a patient safety contact who is available to receive and communicate information. Increased organ distribution has resulted in a large number of organizations working more closely together than ever before, yet there is widespread variability in practices pertaining to reporting, processing, and following-up on information with members' designated patient safety contacts. The MPSC recommends the OPTN standardize required processes for reporting this information to patient safety contacts. After review, the Ad Hoc Disease Transmission Advisory Committee (DTAC) recognized the importance of standardizing the patient safety contact since the current process contributes to inefficiencies in event reporting and prioritized this as a project for the Winter 2024 public comment cycle. This project will include a subject matter expert workgroup that will likely include representation from multiple OPTN committees, including the MPSC.

Clarify Requirements for Reporting Post-Transplant Diseases

OPTN Policy 15.5 (Transplant Program Requirements for Communicating Post-Transplant Discovery of Disease or Malignancy) requires transplant programs to communicate certain test results or information received post-transplant that indicate donor-derived disease is possible. The policy is difficult to interpret and therefore hard to communicate and enforce. The MPSC recommends the OPTN clarify the requirements, including the organisms that should be reported and the timeframe after transplantation at which diseases should be reported. The DTAC acknowledged the importance of this topic and the burden on OPOs and transplant programs due to large volume of reports and required information with each report. The DTAC intends to prioritize the project after the Patient Safety Contact project described above.

Review Prohibited Vessel Storage Policies

OPTN Policy 16.6.B (Extra Vessels Storage) prohibits storage of any vessels from a donor who has tested positive for HCV+ vessels. Policy 16.6.B also requires programs to destroy all stored vessels after 14 days. Given the increased use of organs from donors who test positive for HCV, the treatment options available for HCV, and the challenges programs face trying to obtain vessels for modification of a transplant, the MPSC suggests reconsidering whether storing any HCV+ vessels should be prohibited. The MPSC also questions what empirical evidence exists to justify the requirement that vessels are discarded after 14 days and seeks improved clarification on what time vessel storage is determined to begin. Both DTAC and the OSC expressed interest in working on the vessel storage referral, particularly revising the vessel storage timeframe, but both noted a potential barrier for removing restrictions on storage of HCV+ vessels is that it would require revisions to the 2020 PHS Guideline.

Create a Centralized Vessel Storage Reporting Mechanism

OPTN Policy 16.6.A (Extra Vessels Use and Sharing) permits transplant hospitals to share certain stored extra vessels with other transplant hospitals. However, members have reported it is difficult to find vessels when needed and one member suggested a centralized tracking and reporting system that members can use to identity which hospitals may have vessels available. The MPSC acknowledged that a centralized system could also improve tracking of vessel disposition. The OSC supported the idea, but acknowledged it would be a large project and the OSC does not have the necessary capacity right now to take on this project. The OSC will revisit this referral and possible timelines in November 2023.

Align Organ Packaging Labels with OPTN Policy Requirements

The information required on organ packaging labels in OPTN Policy is inconsistent with the information required on the OPTN standardized label as incorporated in the OPTN Computer System. For example, OPTN Policy 16.3.D (Internal Labeling of Extra Vessels) and OPTN Policy 16.3.F (External Labeling) do not require cross clamp date and time on internal and external packaging labels, but it is a field that is on the labels members are required to use in the OPTN Organ Labeling, Packaging, and Tracking System. The MPSC recommends the OPTN consider aligning the two for clarity and consistency. The OSC agreed that this issue should be investigated further by reviewing the policy for internal and external labeling then proposing modifications to ensure the policy language is consistent with the required labels.

Consider Clarifying DCD Conflicts of Interest Policies

OPTN Policy 2.15.F (Withdrawal of Life Sustaining Medical Treatment or Support) and OPTN Policy 2.15.G (Pronouncement of Death) prohibits certain individuals from guiding or administering palliative care or declaring death for DCD donors. As it is becoming increasingly common for OPOs to employ Intensivists and other hospital staff who may care for patients who are later referred for donation, the MPSC recommends the OPTN consider clarifying this policy to address specific roles and relationships between donor hospital and OPO staff. The OPO committee agreed with the recommendation to clarify this policy and agreed to sponsor this as a new project. Work will begin in July 2023 with the goal of a public comment proposal for the Winter 2024 public comment cycle.

Increasing Transparency

Since December, the MPSC has added a section on the OPTN website for "MPSC Resources." Currently, the site includes reports to the OPTN Board of Directors, community messages from the MPSC, and links to additional monitoring resources from the SRTR and CMS. The MPSC will add resources to this page as they become available.

At its December 2022 meeting, the OPTN Executive Committee granted the MPSC the authority to distribute messages about important findings from MPSC reviews. The first communication "An important message from the MPSC on donation after circulatory death (DCD) protocols and managing multiple organs" was posted to the OPTN website on January 23, 2023, and a second message is pending final HRSA approval.

As noted later in the report, the MPSC has continued to share information about the MPSC at various conferences. At the UNOS Transplant Management Forum in April 2023, current and former MPSC members presented data and lessons learned from living kidney donor deaths reviewed by the MPSC⁹, common safety situations reported through the Improving Patient Safety Portal¹⁰, and the MPSC's implementation of new transplant program performance metrics¹¹. At the Association of Organ Procurement Organizations Annual Meeting in June, current MPSC members and staff shared

⁷ https://optn.transplant.hrsa.gov/about/committees/membership-professional-standards-committee-mpsc/mpsc-resources/.

⁸ https://optn.transplant.hrsa.gov/news/an-important-message-from-the-mpsc-on-donation-after-circulatory-death-dcd-protocols-and-managing-multiple-organs/.

⁹ Cooper, M. (2023, May 17). *Living Kidney Donor Deaths: MPSC Analysis and Insights* [Conference presentation]. UNOS Transplant Management Forum, Denver, CO, United States.

¹⁰ Womble, E., Stillion, L. (2023, May 17). *The Improving Patient Safety Portal and the OPTN Membership and Professional Standards Committee (MPSC): How you can report, what other members are reporting, and what the MPSC wants you to know* [Conference presentation]. UNOS Transplant Management Forum, Denver, CO, United States.

¹¹ Formica, R. (2023, May 18). *The Clinical Use of Transplant Center Metrics* [Conference presentation]. UNOS Transplant Management Forum, Denver, CO, United States.

information about the MPSC's review of allocations out of sequence ¹² After the conferences, staff are working to share the information on the "MPSC Resources" page and communication efforts.

Though the MPSC has a duty to protect information shared in the confidential medical peer review setting, the MPSC is providing additional updates to the OPTN Board of Directors regarding significant monitoring activities, including a closed session update on the Board of Directors' June 9, 2023, conference call. The MPSC has also changed its frequency of providing written reports and will provide the Board with a report at the Board's two in-person meetings each year.

Patient Safety Education Work Group

The Patient Safety Project aims to share information with the donation and transplant community to heighten awareness of safety, promote effective practices, and prevent future occurrences. Since December, the Patient Safety Work Group converted the information from the 2022 presentation for the Transplant Quality Institute¹³ into a resource that can be shared with the broader community. The resource describes the types of serious safety events the MPSC has reviewed, including common factors that can contribute to the transplant of the wrong organ or patient, and recommendations for improvements to avoid similar issues. In addition, the work group drafted case studies of safety situations. The group is working to refine the case studies and to determine the best way to disseminate these learnings to help drive continuous improvement and ensure patient safety.

Living Donor Event Work Group

The Living Donor Event project aims to share information with the transplant community on the incidence of living donor events and the lessons learned from MPSC reviews to promote effective practices. The work group, composed of previous and current MPSC members, reviewed cases and categorized the nature of living donor kidney deaths, particularly those that may have a potential to be donation-related, including complications during the recovery procedure, donor medical issues, suicide or potential suicide, and overdose. A draft article has been completed and the work group intends to submit the abstract for publication. As noted in the section above, this topic was presented during two breakout sessions at the recent Transplant Management Forum.

Educational Efforts

Staff and the MPSC work together to share a number of presentations, posters, and other educational resources about MPSC-related activities with the community throughout the year. At each multi-day MPSC meeting, in addition to considering policy improvement topics to share with the POC, the MPSC also discusses educational resources and communications that would be beneficial to members. Appendix A includes all MPSC-related posters and presentations that occurred over the past year.

¹² Herber, K., Gauntt, K. (2023, June 13). June *What is Contributing to the Rise in out of Sequence Kidney Transplants?* [Conference presentation]. AOPO Annual Meeting, Orlando, FL, United States.

¹³ Womble, E., Lagana, K. (2022, October 20). *OPTN Patient Safety Data* [Conference presentation]. Transplant Quality Institute, Atlanta, GA, United States.

Monitoring Activities

The charts below detail the various types and outcomes of MPSC monitoring activities between December 2022 and May 2023. Additional information about monitoring processes is available at https://optn.transplant.hrsa.gov/governance/compliance/

As required by the OPTN contract, the MPSC receives the Report of Monitoring Activities prior to each multi-day MPSC meeting. The report provides additional data and information about monitoring activities and is included as Appendix B to this report.

Performance Reviews

References to performance reviews include transplant program outcome reviews, transplant program functional inactivity reviews, and OPO organ yield reviews. As outlined in the OPTN Bylaws, factors the MPSC considers when evaluating program or OPO performance includes but is not limited to the following:

- Has the program or OPO demonstrated a patient mix, based on factors not adequately adjusted for in the SRTR model, that affected its outcomes?
- Is there a unique clinical aspect of the program or OPO (for example, clinical trials being conducted) that explains the lower than expected outcomes?
- Has the program or OPO evaluated their performance, developed a plan for improvement, and implemented the plan for improvement?
- Has the program or OPO demonstrated improvement in their outcomes based on recent data?
- Has the program or OPO demonstrated an ability to sustain improvement in outcomes?

Transplant Program Outcome Reviews

As described in the Transplant Program Performance Metrics Enhancement Project section above, in July 2022, the MPSC implemented two newly approved post-transplant performance metrics: 90-day graft survival, and 1-year conditional on 90-day graft survival. Two pre-transplant metrics, offer acceptance rate ratio and pre-transplant waitlist mortality rate ratio, will be implemented in July 2023 and July 2024, respectively. In preparation for the implementation of offer acceptance rate ratio, staff revised templates and case summaries to provide members and the MPSC with all the information they need for review. In addition to working with members under review, staff also provide a memo describing resources to programs that fall within the performance improvement or "yellow zone" of the metrics.

Table 4 below shows the total number of submissions reviewed by the MPSC from December 2022 – May 2023; they do not reflect the number of individual programs under review, as a program may submit multiple reviews to the MPSC throughout the year's review cycles. The newly identified programs are included in the "send initial inquiry" category.

Table 4: Number of Transplant Program Outcome Submissions Reviewed

MPSC Action	Program Type					Total
	Heart Kidney Liver Lung Pancreas			TOtal		
Send initial inquiry	7	9	4	1	1	22
Continue to monitor	3	9	2	4	0	18

MPSC Action		Program Type				
	Heart	Kidney	Liver	Lung	Pancreas	Total
Skip a cycle	0	0	0	0	0	0
Informal discussions (held)	1	1	0	0	0	2
Informal discussions (offer pending)	0	0	0	0	0	0
Peer visit	2	0	0	0	0	2
Request to inactivate	0	0	0	0	0	0
Released	4	6	4	3	0	17

Functional Inactivity

As required by the OPTN Bylaws, Appendix L, Section D.10.C, the MPSC periodically reviews transplant program functional inactivity. Table 5 outlines the triggers for functional inactivity review if the program does not perform a transplant during the stated period:

Table 5: Transplant Program Functional Inactivity Requirements

rable 3. Transplant Frogram Functional mactivity Requirements					
Program Type	Inactive Period				
Kidney, Liver or Heart	3 consecutive months				
Lung	6 consecutive months				
Pancreas (K/P)	Both of the following:				
	1. Failure to perform at least 2 transplants in 12 consecutive months				
	2. Either of the following in 12 consecutive months:				
	a. A median waiting time of the program's K/P and pancreas candidates that is above the 67 th percentile of the national waiting time				
	b. The program had no K/P or pancreas candidates registered at the program				
Ctand alone nediatric					
Stand-alone pediatric	12 consecutive months				
transplant programs					

Table 6 shows the total number of functional inactivity submissions reviewed by the MPSC; they do not reflect the total number of programs under review. Some programs may have provided multiple submissions throughout the year. The MPSC's review cycle coincides with each of the MPSC's three multi-day meetings each year. With changes to the inquiries used for outcomes reviews, staff plan to propose revisions to the tools used in inactivity review.

Table 6: Number of Transplant Program Functional Inactivity Submissions Reviewed

- and of the state								
MDCC Action								
MPSC Action	Heart	Kidney	Liver	Lung	Pancreas	Total		
Send initial inquiry	0	0	0	0	4	4		
Continue to monitor	0	0	0	0	0	0		
Skip a cycle	0	0	0	0	0	0		
Informal discussions (held)	0	0	0	1	0	1		

MPSC Action						
IVIPSC ACTION	Heart	Kidney	Liver	Lung	Pancreas	Total
Informal Discussions (offer pending)	0	0	0	0	0	0
Peer visit	0	0	0	0	0	0
Request to inactivate	0	0	0	0	0	0
Released	0	0	0	0	0	0

OPO Organ Yield

As required by the OPTN Bylaws Appendix B, Section 2, the MPSC identifies an OPO for review for lower than expected organ yield if all of the following criteria are met for any organ type or all organs:

- More than 10 fewer observed organs per 100 donors than expected
- A ratio of observed to expected yield less than 0.90.

• A two-sided p-value is less than 0.05

These figures represent the number of submissions reviewed by the MPSC; they do not reflect the total number of OPOs under review. Some OPOs may have provided multiple submissions throughout the year. The MPSC's review cycle coincides with each of the MPSC's three in-person meetings each year.

MPSC Action Heart Kidney Liver Lung **Pancreas** Aggregate Total Send initial inquiry Continue to monitor Skip a cycle Informal discussions (held)

Table 7: Number of OPO Organ Yield Submissions Reviewed

Compliance Reviews

Informal discussions (offer

pending)

Peer visit

Released

References to compliance reviews include site surveys, investigations, and allocations reviews. As outlined in the OPTN Bylaws, the MPSC's evaluation of compliance issues typically includes but is not limited to the following:

- Does the issue pose an urgent and severe risk to patient health or public safety?
- Does the issue pose a substantial risk to the integrity of or trust in the OPTN?
- Did the member show evidence of corrective action upon learning of the potential violation?
- What is the likelihood of recurrence?
- Do patient medical records or other documentation provide sufficient detail to determine the presence of mitigating factors at the time the potential violation occurred?
- The member's overall OPTN compliance history

The table below summarizes the number of different compliance reviews and the number of MPSC actions taken based on the Committee's reviews, including direct interactions with members as a part of the MPSC's review. Descriptions of the review processes and additional details about the types of reviews are below.

Table 8: Compliance Reviews and MPSC Actions

	MPSC Action	Allocation		
IVIF 3C ACTION				
		Reviews	Site Surveys	Investigations
Action	Close with no action	17	5	26
	Follow up survey	n/a	2	n/a
	Notice of Noncompliance	4	0	14
	Letter of Warning	0	0	0
	Probation	0	0	0
	Member Not in Good Standing	0	0	0
Interactions	Informal Discussions (held)	1	0	3
	Informal Discussions (offer pending)	0	0	1
	Interviews (held)	0	0	0
	Interviews (offer pending)	0	0	2
	Peer Visit	0	0	4

Allocation Reviews

Staff review the match run for every allocation that results in a transplant to ensure an appropriate candidate received the organ. The MPSC reviews each OPO member's allocation issues on a yearly basis in order to identify and evaluate potential trends or behaviors. The MPSC reviews other allocation issues, such as hospitals accepting an organ for one recipient but transplanting another, on a real-time basis. As noted in the Allocation Subcommittee section above, the MPSC has noted a significant increase in the number of OPO allocations out of sequence, and the Committee has formed a work group to evaluate potential changes and improvements to the MPSC's review of allocations information to identify the most concerning patterns or trends.

Table 8 above notes 17 total allocation reviews for the year, which only covers annual review for approximately a third of OPOs. Each OPO's review can contain anywhere from 1 to more than 200 allocations out of sequence. In most cases, after reviewing the detail of each individual allocation, the MPSC closes the OPO's review with no action because the MPSC determined the OPO acted appropriately to place organs that were unlikely to be utilized due to logistical issues like family or donor OR time constraints, late declines by the initial accepting program, or travel issues. Of the four instances where the MPSC issued a Notice of Noncompliance, two involved a single allocation where the recipient did not qualify for simultaneous liver-kidney allocation but the hospital requested both organs and the OPO agreed. The MPSC issued the third Notice of Noncompliance to a transplant program that transplanted a candidate other than the candidate for whom they originally accepted the organ. The MPSC determined that the program made the decision to avoid non-utilization of an organ once the intended recipient was deemed not suitable but failed to properly notify the OPO of the alternative allocation. The MPSC also requested an informal discussion with one OPO that did not consistently respond to allocations inquiries, which resulted in the fourth Notice of Noncompliance.

Site Surveys

Staff survey each transplant program and OPO approximately once every three years. If staff identify any noncompliances during the review, they apply a survey evaluation tool to determine whether to conduct a virtual follow up review of the applicable policies in approximately nine months. If the member appropriately addressed any areas of noncompliance on a follow up review, the review is closed with no action. If the member does not demonstrate improvement on the follow up survey, staff will forward the survey findings to the MPSC for review. The MPSC typically requests an additional follow up review and may issue a Notice of Noncompliance for continued failure to improve.

Table 8 below shows the number of total surveys conducted for both OPOs and transplant programs, and the number of MPSC actions. The Monitoring Effectiveness Report in Appendix B describes compliance rates for policies reviewed during site surveys, and education and monitoring changes and system enhancements identified as a result of survey findings. It also reports the number of routine and follow up desk reviews performed each quarter and the outcome by OPOs, transplant program, and living donor component surveys.

Trends in compliance monitoring are in a state of constant evolution. It has been observed that the implementation of complex policies often results in higher rates of non-compliance. These policies, which involve multiple transplant hospital service lines and stakeholders beyond the institution, such as insurance providers, require meticulous adherence to specific time requirements. This is exemplified by the compliance requirements outlined in OPTN Policy 15.2 (Candidate Pre-Testing Infectious Disease Reporting and Testing Requirements) and 15.3.C (Post-Transplant Required Infectious Disease Reporting). These newer policies necessitate the involvement of various service lines including hospital admissions, laboratory, operating room, and transplant program staff, as well as the utilization of electronic medical records and insurance reimbursement protocols. OPTN Policy 15.2 requires candidate samples to be drawn for pre-transplant infectious disease testing during the hospital admission for transplant but prior to anastomosis of the first organ. The policy allows for samples to be drawn prior to hospital admission for candidates under the age of 12. OPTN Policy 15.3.C requires transplant programs to test all recipients post-transplant for HIV NAT, HBV NAT, and HCV NAT, at least 28 days but not later than 56 days post-transplant. For both policies, if the candidate is already known to be infected with HIV, HBV, or HCV, then the testing for that known infection or infections is not required.

Presently, the overall compliance rates for Policy 15.2 and 15.3.C are 75% and 67%, respectively.

Reasons for member noncompliance with OPTN Policy 15.2 include:

- Policy requires candidates be tested for HIV using a CDC recommended laboratory HIV testing algorithm; members reported confusion in interpreting the algorithm.
- Some members reported that they did not think repeat testing of Hepatitis B surface Antibody testing would be required when a patient had a pre-admission positive test that showed immunity or previous infection.
- Lag in the member's IT systems implementing updates to pre-transplant order sets.
- If a patient is admitted on the same day as transplant, it was often observed that the samples were drawn the same day but after anastomosis.

Reasons for member noncompliance with OPTN Policy 15.3.C include:

 Members have reported that insurance companies are denying payment and placing the coverage of the NATs on either the patients or the providers.

- Confusion with the tests in general and thought the tests were only required if there were risk criteria present in the donor.
- The post-transplant testing is typically managed by post-transplant coordinators and so if a patient was still inpatient in the testing window, the inpatient coordinators may not have been aware of the requirement to test. It was rare to not see the tests done at all, but rather the tests were not completed within the required 28- to 56-day post-transplant window.

Staff shared these findings and observations with the DTAC in December 2022, along with the accuracy of the post-transplant test results reported on the 6-month TRFs (related to Policy 15.3.C but required by Policy 18.1). In addition, it is worth noting that compliance with OPTN Policy 5.8.B (Pre-Transplant Verification Upon Organ Receipt) first presented similarly to the previously mentioned policies with the initial monitoring period from 2017-2019, compliance rates were observed to be as low as 68%. But, in more recent years, specifically 2021 and 2022, compliance rates have demonstrated a significant improvement and have exceeded 97%. Compliance with 5.8.B also required meticulous adherence to specific time requirements and involvement from multiple hospital service lines.

Investigations

Staff receive reports directly through the Safety Situation and Living Donor Event sections of the OPTN Patient Safety Reporting Portal, as well as through the Member Reporting Line, fax, mail, and referrals from other staff, including Patient Services.

Investigative staff triage each report to assess the potential risk to patient safety or public health and determine if immediate intervention is needed. As noted in the "Require Reporting of Patient Safety Events Project" section above, staff escalate reports of certain events to MPSC leadership and HRSA as required by the 2011 Wakefield letter and the OPTN contract. Staff investigate reports by sending inquiries and requests for information to applicable members and analyzing available information in OPTN systems. The investigation seeks to determine whether the report can be substantiated and whether a noncompliance with OPTN obligations, including any risk to patient safety, exists. Staff provide updates to MPSC leadership, HRSA and members of the MPSC as needed, for example, when significant clinical expertise is required to determine whether any patient safety risks or noncompliances exist. If the investigation substantiates a noncompliance, staff forward the investigation results to the MPSC for review. If the investigation is unable to substantiate the report and/or determines no violation occurred, staff have historically closed the case and have not forwarded it to the MPSC for review.

Routine Review of All Investigative Activity

In late 2022, the MPSC established a process to review all investigative activity. Historically, the MPSC only reviewed reports when investigations revealed a potential noncompliance with OPTN obligations. Though staff would consult with MPSC members during the investigation, particularly for guidance on clinical matters pertaining to medical judgement and patient safety, the full Committee did not receive information about investigative activities that were not identified as a potential noncompliance or safety issue. Staff revised the process and expanded the scope to provide the MPSC with greater information about all reported events and to aid in its decision-making and oversight function.

Though this report focuses on activities from December 2022 to May 2023, the following counts reflect all information shared with the MPSC to date as part of this effort. The data below reflect investigative activities of reports received from August 2022 to April 2023:

Table 9: Investigative Activity for Reports submitted to the OPTN August 2022 - April 2023:

Total reports		511
Self-reports		141
	Patient Safety Portal	286
	Automated Reports	120
	Internal Email – Other UNOS Staff	83
Mode of receipt	External Email	6
	Member Reporting Phone Line	11
	Other Phone Line	2
	Mail	3
	Transplant hospital	300
	ОРО	194
Subject type	Lab	11
	Non-member/unknown	7
	Transplant hospital	214
	ОРО	70
	Lab	13
Reporter type	Patient/donor family	26
neporter type	Anonymous	13
	Automated report	125
	Other UNOS staff	50
	Referred to MPSC for review	112
	Closed after review by MPSC leadership/HRSA	24
Case outcomes	Closed without MPSC/HRSA review	255
	Still active	120

Examples of reasons why staff did not forward a case for review by the MPSC include the absence of a policy noncompliance, staff inability to substantiate the allegation, MPSC-approved operational directing staff to close the case if certain criteria are met, referral to other staff for processing through alterative pathways, and subject of investigation is a not a member of the OPTN.

The MPSC received presentations of these reports at its October 2022, November 2022, December 2022, January 2023, and February 2023 meetings. Following the February 2023 presentation, the Committee decided to receive written reports during monthly conference calls but requested presentations at in-person meetings.

As noted earlier in the report, staff and an MPSC member presented this information at the UNOS Transplant Management Forum on May 17, 2023.

Membership Applications

The MPSC monitors compliance with OPTN membership requirements, including new member applications. Table 9 below summarizes the different types of applications reviewed from December 2022 through May 2023. The total number of applications reviewed, 384, decreased slightly when compared to the 395 applications reviewed from December 2021 through May 2022. This decrease is attributed to a decline in the number of transplant program key personnel applications for primary physicians and primary surgeons, which fell from 256 to 211 so far this year.

Table 10: Number and Type of MPSC Application Reviews

Type of Application	Number
Transplant Hospitals and Programs	
New Programs and Components	18
Key Personnel Applications	211
Program and Component Conditional Approvals	3
Conditional to Full Approvals	16
Conditional Extensions	5
Program and Component Long Term Inactivation	26
Inactivation Extensions	10
Program and Component Reactivations	11
Program and Component Withdrawals	12
Transplant Hospital Withdrawals	1
Organ Procurement Organizations (OPOs)	
OPO Key Personnel Change Notifications	5
OPO Withdrawal	1
Histocompatibility Labs	
New Histocompatibility Lab	1
Histocompatibility Lab Key Personnel Changes	50
Histocompatibility Lab Withdrawals	1
Non-Institutional Members	
New Non-Institutional Members	1
Non-Institutional Membership Renewals	12
TOTAL	384

Additional Staff-Led Improvement Activities

Individual Member Focused Improvement

The Individual Member Focused Improvement (IMFI) initiative aims to help individual members improve using quality improvement tools and engagements custom designed for the member and their unique need. Following the completion of a three-year discovery and design phase during which staff completed several pilot projects with input from the MPSC, broader deployment of IMFI started on October 1, 2022; the IMFI initiative is available to all OPTN members. Eight pilot projects were completed as of April 2023, which consisted of seven transplant programs and one organ procurement organization; all projects that were started prior to October 1, 2022, are still considered "pilot projects". Ten projects have commenced since October 1, 2022, and are still ongoing as of May 2023. All IMFI activities have been conducted virtually, which has increased access and ability to run multiple projects at one time.

The improvement activities staff offer to members engaged in IMFI include:

- OPTN Computer System Data Services Portal Training: Staff facilitate education session(s) with the member team on the various data portal tools available and real-time troubleshooting with OPTN subject matter experts (SMEs)
- Process Mapping/Failure Modes and Effects Analysis: Staff process map and evaluate the member's requested process in a collaborative session during which potential failure points and recommendations for improvement are discussed.
- Peer Mentoring: Staff organize collaborative sessions between the member and peer mentors from the community with relevant experience; the member can ask peers questions and for feedback about their improvement project/goal and a variety of topics.

The improvement activities completed with each IMFI member are dependent on what is most appropriate and valuable for their improvement goal.

IMFI is offered as performance improvement support to those members who receive a letter indicating that they are in the established operational boundary for performance improvement (or "yellow") zone for the new post-transplant performance monitoring metrics. Five of the active projects as of May 2023 were started following the member receiving the letter letting them know that their program is in the "yellow zone".

Staff continue outreach at regional meetings and community conferences, with a number of accepted posters and presentations. The team continues to iterate the IMFI project structure with every engagement based on member feedback on what worked well, and what did not, with the hope of decreasing project duration and increasing implementation efficiency.

EGFR Webinar and Member Outreach

The OPTN Board of Directors, at its meeting December 5, 2022, approved a process intended to improve transplant equity by backdating the waiting times of Black kidney candidates who were disadvantaged by previous use of a race-inclusive calculation to estimate their level of kidney function. The Board action requires all kidney transplant programs, starting January 5, 2023, and within one year, to identify those Black kidney candidates whose current qualifying date was based on the use of a race-inclusive

eGFR calculation, and to determine whether a race-neutral eGFR calculation shows they should have qualified sooner to start gaining waiting time for a transplant (even if their waiting time has been based on a different qualifying standard, such as dialysis). Programs must then apply to the OPTN for a waiting time modification for such candidates. Staff are actively supporting OPTN members with education and additional resources including a collaborative webinar which will feature effective practices.

Staff will be proactively reaching out to primary kidney program administrators this summer to establish a dialogue about their level of awareness and compliance with the eGFR policy requirements. Throughout these conversations, staff will offer a range of available resources to support the administrators, while also assessing and documenting their progress towards achieving full compliance with OPTN Policy 3.7.D (Waiting Time Modifications for Kidney Candidates Affected by Race-Inclusive eGFR Calculations).

OPTN Donation after Circulatory Death (DCD) Lung Transplant Collaborative

In addition to the OPTN Offer Acceptance Collaborative, the Collaborative Improvement (CI) team is simultaneously running an OPTN DCD Lung Transplant Collaborative. This project was initiated to complement the work of the OPTN DCD Procurement Collaborative, conducted with 43 OPOs across the nation over two cohorts, and designed to increase the procurement of organs from DCD donors. Twenty-nine lung programs are now voluntarily participating in the effort to increase DCD lung transplants through an 8-month engagement cycle of sharing effective practices and conducting improvement projects within two key areas: optimizing internal transplant processes and patient care practices and strengthening collaboration with OPOs. The cohort is trending favorably to the established goal and project evaluation will begin in August 2023. The project will culminate with a Learning Congress in September 2023 and will be inclusive of both participating and non-participating programs in order to share project learnings and effective practices to the broader transplant community.

The MPSC appreciates the interest in its operations. We look forward to continuing to improve our Committee operations to provide effective oversight over OPTN members, while also helping members improve performance, to the benefit of transplant patients nationwide.

Appendix A: Posters and Presentations

Title	Presenter(s)	Type of Presentation	Conference/ Meeting	Description
Member Quality and MPSC Update	MPSC Members	Presentation	Winter 2023 Regional Meetings	MPSC Regional Representatives presented an update at all eleven Winter 2023 Regional Meetings about the new MPSC Performance Metrics implementation, the Offer Acceptance Collaborative, Reporting of Patient Safety Events, Allocations Monitoring, and OPO Performance Monitoring.
Utilizing a Collaborative Improvement Model to Increase DCD Lung Transplantation	Collaborative Improvement (CI) Team	Poster	Transplant Management Forum	The CI team presented a poster about the framework of the OPTN DCD Lung Collaborative. In particular, the poster highlights how bringing transplant professionals together with a desire to improve in the same area can drive change and progress.
The Improving Patient Safety Portal and the OPTN Membership and Professional Standards Committee (MPSC): How you can report, what other members are reporting, and what the MPSC wants you to know	Emily Womble and Laura Stillion	Presentation	Transplant Management Forum	This presentation reviewed the tools staff use to collect patient safety event data, patient safety trends seen by the MPSC, and how to effectively respond to inquiries and other MPSC requests. Presenters provided examples of types of events to report, and those members do not need to report. Presentation also provided case examples.
Sharing Effective Practices to Improve Post- Transplant Outcomes	Tameka Bland, Amanda Young, Sharon Shepherd, Sam Settimio	Poster	Transplant Management Forum	This poster described the key informant interview process that took place leading up to the implementation of the MPSC's new post-transplant performance metrics. The poster shared the key themes pulled from the key informant interviews and the educational resource created for the community because of

				the information gathering effort.
The OPTN's Individual Member Focused Improvement (IMFI) Initiative	Amanda Young, and community members, Dr. A. Whitney Brown, Deborah Maurer, Heather Marshall, and Misael Tonacao	Virtual Presentation	Transplant Management Forum	This video presentation shared insights from community members who have participated in the IMFI Initiative. It shared perspectives from both members whose programs were engaged in an improvement project with IMFI and peer mentors who served as community subject matter experts to help a member program with their improvement goal.

Appendix B: Monitoring Effectiveness Baseline Report

OPTN ORGAN PROCUREMENT AND TRANSPLANTATION NETWORK

Contract: HHSH250-2019-00001C

Task: United Network for Organ Sharing

Item: A140

Due: 10 business days prior to each MPSC multi day meeting

Submitted: February 1, 2023

Monitoring Effectiveness Baseline Report

MONITORING EFFECTIVENESS BASELINE REPORT

PWS Excerpt:

3.6.2 The Contractor shall measure effectiveness of the processes used to identify compliance, encourage improvement, and determine sanctions

The Contractor shall develop objective metrics to monitor effectiveness of Contractor processes used to monitor OPTN members, identify compliance problems, encourage performance improvement, and determine sanctions. These metrics will be developed with input from the OPTN MPSC and provided to the COR for review and approval by the end of the base contract period. The Contractor shall revise the proposed metrics based on COR comments and resubmit to the COR within 20 business days of receipt of comments for approval. The Contractor shall submit a report by 40 business days after submission of final metrics that documents baseline metric evaluation for Contractor processes. This report will be updated for the COR and the OPTN MPSC and provided 10 business days prior to each in-person MPSC meeting.

Performance Standards

a) Standard: Findings that warrant review of existing processes or development of new processes lead to proposals to change processes.

Table 1. Quantity of deceased donor organ allocations resulting in a transplant wherein a deviation of allocation policy occurred, by type of deviation and fiscal quarter during which the deviation took place, October 1, 2020 - September 30, 2022

Fiscal year & quarter	Actual vs intended	Allocation out of sequence	Local backup	Other	Clean	Total
FY2021 Q1	0 (0)%	347 (4.03)%	154 (1.79)%	85 (0.99)%	8026 (93.2)%	8612
FY2021 Q2	2 (0.02)%	419 (4.8)%	126 (1.44)%	59 (0.68)%	8127 (93.06)%	8733
FY2021 Q3	11 (0.11)%	646 (6.64)%	7 (0.07)%	107 (1.1)%	8964 (92.08)%	9735
FY2021 Q4	5 (0.06)%	682 (7.74)%	9 (0.1)%	88 (1)%	8026 (91.1)%	8810
FY2022 Q1	0 (0)%	634 (7.43)%	7 (0.08)%	78 (0.91)%	7810 (91.57)%	8529
FY2022 Q2	2 (0.02)%	818 (9.29)%	3 (0.03)%	82 (0.93)%	7897 (89.72)%	8802
FY2022 Q3	0 (0)%	859 (9.33)%	47 (0.51)%	114 (1.24)%	8182 (88.92)%	9202
FY2022 Q4	0 (0)%	927 (9.53)%	67 (0.69)%	83 (0.85)%	8651 (88.93)%	9728

Table 1 shows the number of organ allocations resulting in a transplant that deviated from organ allocation policy between October 1, 2020 and September 30, 2022. Deviation types indicate how an allocation deviated from policy. Most deviations are allocations wherein an OPO chose to bypass a candidate on a match run ("Allocation Out of Sequence"). The "Other" category includes directed donations, allocations where the recipient was not on the match run, and any other type of deviation from organ allocation policy. Highlighted shows a consistent increase over time in the proportion of allocations that are out of sequence. As a result of this finding, the OPTN Membership and Professional Standards Committee (MPSC) has created a workgroup to look at the root causes of the uptick in allocations out of sequence as well as how to change MPSC review to mitigate the increase in this trend.

Table 2. Quantity of cases processed by Patient Safety analysts, subset by whether the case was sent to the MPSC,

November 25, 2020 - November 27, 2022

		Was the case sent to the	MPSC?
Timeframe	MPSC Meeting	Yes	No
11/25/2020 - 04/20/2021	July 2021	32 (20.65%)	123 (79.35%)
04/21/2021 - 07/27/2021	October 2021	32 (21.62%)	116 (78.38%)
07/28/2021 - 11/24/2021	February 2022	31 (22.79%)	105 (77.21%)
11/25/2021 - 04/29/2022	July 2022	40 (19.51%)	165 (80.49%)
04/30/2022 - 07/27/2022	October 2022	38 (33.63%)	75 (66.37%)

Table 2 displays the number of cases reviewed by Compliance and Safety Investigators (CSIs) that were or were not sent to the MPSC between November 25, 2020, and November 27, 2022. Data is subset by the timeframe within which investigators received each case, and these timeframes are ranges of dates wherein most cases received within the range and sent to the MPSC would have been reviewed during the corresponding MPSC meeting. November 25, 2020, and November 27, 2022, are used as start and end dates so that their associated MPSC meeting dates as closely align as possible with the October 1, 2020, and September 30, 2022, timeframe that Tables 1, 3 and 4 use. While the proportions of cases reviewed that are sent to the MPSC are not consistent over all timeframes, typically about one fifth of cases reviewed by CSIs were sent to the MPSC during each timeframe.

Table 3. Proportion of member touchpoint survey respondents who answered "Agree" or "Strongly Agree" when asked to answer whether they Strongly Disagreed, Disagreed, Agreed or Strongly Agreed with the following statement about their touchpoint: "The process helped us identify areas of improvement.", October 1, 2020 - September 30, 2022

Fiscal year & quarter	Respondent's answer	Respondent's answer				
	Agree or strongly agree	Disagree or strongly disagree				
FY2021 Q1	17 (94.4%)	1 (5.6%)				
FY2021 Q2	19 (100%)	0 (0%)				
FY2021 Q3	21 (95.5%)	1 (4.5%)				
FY2021 Q4	21 (100%)	0 (0%)				
FY2022 Q1	15 (93.8%)	1 (6.3%)				
FY2022 Q2	17 (94.4%)	1 (5.6%)				
FY2022 Q3	15 (100%)	0 (0%)				
FY2022 Q4	21 (100%)	0 (0%)				

Table 3 indicates the distribution of responses that OPTN touchpoint survey respondents provided when asked whether they strongly agreed, agreed, disagreed, or strongly disagreed with the following statement about their touchpoint "The process helped us identify areas of improvement." This includes the following touchpoints that occurred between October 1, 2020, and September 30, 2022: site survey, informal discussion, interview, hearing, and peer visit. The overwhelming majority of survey recipients answer that they agree or strongly agree with that statement.

Table 4. Transplant recipient program, living donor program, and organ procurement organization policy compliance rates, subset by policy and associated organ type,

October 1, 2020 - September 30, 2022*

Member type	Organ	Policy	Туре	N Total records/	Were records/elements compliant?		
				elements	Yes	No	
Transplant	HR	6.1	Records	1334	1320 (98.95%)	14 (1.05%)	
Recipient		6.1/6.2/6.3/6.4 DEE	Records	2227	2121 (95.24%)	106 (4.76%)	
		6.2	Records	412	411 (99.76%)	1 (0.24%)	
		6.4	Records	518	517 (99.81%)	1 (0.19%)	
	KI	3.6.C	Records	35	24 (68.57%)	11 (31.43%)	
		5.3.C	Records	595	574 (96.47%)	21 (3.53%)	
		8.4	Records	1330	1278 (96.09%)	52 (3.91%)	
		8.5.A	Records	995	979 (98.39%)	16 (1.61%)	
		8.5.D	Records	90	88 (97.78%)	2 (2.22%)	
		8.5.F	Records	304	276 (90.79%)	28 (9.21%)	
		8.5.G	Records	80	80 (100%)	0 (0%)	
	LI	16.6.B Destroying	Records	9973	9927 (99.54%)	46 (0.46%)	
		16.6.C Reporting	Records	9973	9515 (95.41%)	458 (4.59%)	
		9	Records	2329	2213 (95.02%)	116 (4.98%)	
		9.1.A/9.1.B/9.1.C/9.2	Records	313	304 (97.12%)	9 (2.88%)	
		9.6/9.2	Records	1966	1938 (98.58%)	28 (1.42%)	
		9.9.B	Records	251	235 (93.63%)	16 (6.37%)	
	LU	10.1 DEE (listings)	Records	1177	1123 (95.41%)	54 (4.59%)	
		10.1 Listings	Records	1293	1117 (86.39%)	176 (13.61%)	
		10.1.A/10.1.B/10.1.C (LU,	Records	30	27 (90%)	3 (10%)	
		peds) (Listings)					
-	PA	11.4.B	Records	529	500 (94.52%)	29 (5.48%)	
	Non-	15.2	Records	1166	865 (74.19%)	301 (25.81%)	
	specified	15.3.B	Records	1762	1706 (96.82%)	56 (3.18%)	
		15.3.C	Records	1006	701 (69.68%)	305 (30.32%)	
		3.2	Records	3888	3849 (99%)	39 (1%)	
		3.5 (NOL)	Records	2961	2839 (95.88%)	122 (4.12%)	
		3.5 (NOR)	Records	658	627 (95.29%)	31 (4.71%)	
		3.9	Records	4538	4516 (99.52%)	22 (0.48%)	
		5.8.B	Records	5700	5398 (94.7%)	302 (5.3%)	
OPO	6.1/6.2/6.3/6.4 DEE 6.2 6.4 KI 3.6.C 5.3.C 8.4 8.5.A 8.5.D 8.5.F 8.5.G LI 16.6.B Destroying 16.6.C Reporting 9 9.1.A/9.1.B/9.1.C/9.2 9.6/9.2 9.9.B LU 10.1 DEE (listings) 10.1 Listings 10.1.A/10.1.B/10.1 peds) (Listings) PA 11.4.B Non- 15.2 specified 15.3.B 15.3.C 3.2 3.5 (NOL) 3.5 (NOR) 3.9 5.8.B OPO 15.4.A 16.5 18.1 (PTRs) 18.1 (Timeliness DDR 18.1 (Timelin	15.4.A	Records	555	547 (98.56%)	8 (1.44%)	
		16.5	Records	555	551 (99.28%)	4 (0.72%)	
		18.1 (PTRs)	Records	55954	55836 (99.79%)	118 (0.21%)	
		18.1 (Timeliness DDRs)	Records	12437	12361 (99.39%)	76 (0.61%)	
		18.1 (Timeliness feedback)	Records	12889	12834 (99.57%)	55 (0.43%)	
		18.1 (accuracy DDRs)	Records	200	165 (82.5%)	35 (17.5%)	
		18.1 (noneligible)	Records	205	186 (90.73%)	19 (9.27%)	
		2.11.B #2c [LI]	Records	395	395 (100%)	0 (0%)	
		2.11.C #4 [HR]	Records	169	169 (100%)	0 (0%)	
		2.11.D #5 [LU]	Records	119	119 (100%)	0 (0%)	
		2.11.E #5 & #6 [PA]	Records	49	49 (100%)	0 (0%)	
		2.13 #5	Records	525	525 (100%)	0 (0%)	
			Records	555	546 (98.38%)	9 (1.62%)	
			Records	555	549 (98.92%)	6 (1.08%)	
		2.14.C #6	ricco. as				
			Records	555	529 (95.32%)	26 (4.68%)	
		2.2 #14					

		2.2 #5	Records	555	555 (100%)	0 (0%)
		2.3	Records	545	545 (100%)	0 (0%)
		2.4	Records	555	555 (100%)	0 (0%)
		2.5	Records	570	569 (99.82%)	1 (0.18%)
		2.6.B	Records	123	121 (98.37%)	2 (1.63%)
		2.8 #7	Records	550	544 (98.91%)	6 (1.09%)
		2.9 #1	Records	525	523 (99.62%)	2 (0.38%)
		2.9 #2	Records	546	545 (99.82%)	1 (0.18%)
		2.9 #3*	Records	99	99 (100%)	0 (0%)
		Accuracy of DonorNet	Elements	4600	4576 (99.48%)	24 (0.52%)
		Accuracy of Serologies	Records	555	549 (98.92%)	6 (1.08%)
Living	LDK	13.4.A (LDK)	Records	87	71 (81.61%)	16 (18.39%)
Donor		13.4.C (LDK)	Elements	1456	1247 (85.65%)	209 (14.35%)
		14.4.B	Elements	6732	6707 (99.63%)	25 (0.37%)
	LDL	14.4.C	Elements	810	804 (99.26%)	6 (0.74%)
		18.5.B (Accuracy) LI 6 months	Elements	866	847 (97.81%)	19 (2.19%)
		18.5.B (Accuracy) LI one	Elements	208	206 (99.04%)	2 (0.96%)
		year				
	Non-	14.1.A	Elements	10231	9792 (95.71%)	439 (4.29%)
	specified	14.2.A	Elements	3296	3012 (91.38%)	284 (8.62%)
		14.3	Elements	35830	34403 (96.02%)	1427 (3.98%)
		14.4.A	Elements	24687	24497 (99.23%)	190 (0.77%)
		14.5.A/14.5.B	Elements	1420	1416 (99.72%)	4 (0.28%)
		14.5.C	Elements	711	710 (99.86%)	1 (0.14%)
		14.7	Records	887	834 (94.02%)	53 (5.98%)
		18.1 (Timely)	Records	1040	929 (89.33%)	111 (10.67%)
		0 /4 /04				

^{*} Policy 2.9 #3 was retired on 3/1/21

Table 4 shows the quantity of the records or elements of transplant programs, living donor programs, and organ procurement organizations reviewed by site surveyors, by policy and whether the surveyor identified a record as being compliant with policy. This includes records that were surveyed between October 1, 2020, and September 30, 2022. Highlighted are policies with a greater than 5 percent non-compliance rate. Targeted education and monitoring changes, as well as system enhancements have been made to help increase compliance with low compliance policies. Some examples are described below:

OPTN Policy 3.6.C: Individual Waiting Time Transfers

We have seen a low rate of compliance with this policy so we are expanding our monitoring to a process review for all organ groups. By shifting the focus away from self-reporting and having a process in place to discuss this with all members we will be providing a greater service for our members.

OPTN Policy 5.8.B: Pre-Transplant Verification Upon Organ Receipt

In addition to chart review, we also include a policy and process review with the member. Site survey collaborated with Professional Education to develop an educational webinar that is now available as a resource to the member.

OPTN Policy 8.5.F: Highly Sensitized Candidates

Site Survey submitted an educational referral and development request due to a high non-compliance rate for the CPRA Approval Form and feedback from members about the issues with the system. They are updating the language on the form to help members understand and comply with policy.

OPTN Policies 15.2: Candidate Pre-Transplant Infectious Disease Reporting and Testing Requirements and 15.3: Required Post-Transplant Infectious Disease Reporting and Testing

These policies were implemented in 2021 to align with the 2020 PHS Guidelines. We have collaborated with Policy and Community Relations and Professional Education for external educational efforts, including an FAQ and educational webinars. We continue to provide targeted education surrounding new policies as well as providing resources to members on the OPTN website.

OPTN Policies 13.4.A and 13.4.C

We have seen a lower rate of compliance with these policies, so we are expanding upon our current monitoring to add in a process review when we do not have a sample of KPDs in order to allow for discussion and education.

At kidney and liver programs with living donor components, we are increasing the number of fields reviewed for accuracy on LDRs, in order to expand member awareness of the quality of this data.

We continue to review policies with very high rates of compliance to decide if it is time to retire monitoring. During OPO surveys, members have historically demonstrated a high rate of compliance with the following OPTN policies: 2.9 Blood and urine cultures, 2.11.C Echocardiogram for deceased heart donors, 2.11.D Sputum gram stain for deceased lung donors, and 2.13 Fluid intake and output. We will retire our monitoring of these policies, but for blood and urine cultures required by Policy 2.9 we will still be monitoring any post-procurement culture results under Policy 15.4. For OPTN Policy 2.14.B, our monitoring only includes the first four required elements of the policy so we are expanding the monitoring to include the elements required to be verified when the intended recipient is known prior to organ recovery. This will allow for an opportunity for discussion and education as well. We will also add a process review for OPTN Policy 16.5, Verification and recording of information before shipping, to allow for an opportunity to educate about policy requirements. Additionally, at OPOs, we will focus our monitoring of accuracy on DDRs to those fields that require source documentation or interpretation prior to data entry.

Other improvements made based on educational referrals:

Members were having trouble tracking LAS >50 and policy requirements. There is now a waitlist report to aide members in complying with policy. Lung height and weight fields have been decoupled to help members enter accurate data. PAO2 values now allow a decimal point to allow for more accurate data entry.

Table 5. Proportion of members which underwent a <u>routine site survey</u>, and based on those findings the MPSC or Member Quality either did or did not recommend that they participate in a focused desk review, October 1, 2020 – September 30, 2022

Member type	Fiscal year/quarter	N Total programs	Did the MPSC or UNOS recommend for a focused desk review?		
		surveyed			
			No	Yes	
Transplant Recipient	FY2021 Q1	62	38 (61.29%)	24 (38.71%)	
	FY2021 Q2	65	48 (73.85%)	17 (26.15%)	
	FY2021 Q3	86	67 (77.91%)	19 (22.09%)	
	FY2021 Q4	52	31 (59.62%)	21 (40.38%)	
	FY2022 Q1	46	25 (54.35%)	21 (45.65%)	
	FY2022 Q2	57	28 (49.12%)	29 (50.88%)	
	FY2022 Q3	71	29 (40.85%)	42 (59.15%)	
	FY2022 Q4	68	27 (39.71%)	41 (60.29%)	
OPO	FY2021 Q1	5	5 (100%)	0 (0%)	
	FY2021 Q2	2	2 (100%)	0 (0%)	
	FY2021 Q3	5	4 (80%)	1 (20%)	
	FY2021 Q4	4	3 (75%)	1 (25%)	
	FY2022 Q1	6	6 (100%)	0 (0%)	
	FY2022 Q2	6	6 (100%) 0 (0%)		
	FY2022 Q3	3	2 (66.67%)	1 (33.33%)	
	FY2022 Q4	5	3 (60%)	2 (40%)	
Living Donor	FY2021 Q1	23	12 (52.17%)	11 (47.83%)	
	FY2021 Q2	22	12 (54.55%)	10 (45.45%)	
	FY2021 Q3	26	11 (42.31%)	15 (57.69%)	
	FY2021 Q4	21	15 (71.43%)	6 (28.57%)	
	FY2022 Q1	15	10 (66.67%)	5 (33.33%)	
	FY2022 Q2	20	11 (55%)	9 (45%)	
	FY2022 Q3	20	10 (50%)	10 (50%)	
	FY2022 Q4	18	12 (66.67%)	6 (33.33%)	

Table 5 indicates the number and proportion of transplant recipient routine site surveys which were performed between October 1, 2020, and September 30, 2022, and resulted in a recommendation from the MPSC or Member Quality to perform a follow-up desk review. Follow-up desks continue to be needed to ensure CAP effectiveness with new policies or changes in practice. Please note, follow up focused desks can be as small as one policy reviewed or multiple policies for different programs. Each quarter, between around 1 in 4 or 1 in 2 of transplant recipient and living donor program routine site surveys result in a recommendation for a focused desk review. OPO routine surveys typically do not result in a recommendation for a focused desk review.

Table 6. Proportion of members which underwent a <u>focused desk review</u>, and based on those findings the MPSC or Member Quality either did or did not recommend that they participate in another focused desk review,

October 1, 2020 – September 30, 2022

Member type	Fiscal year/quarter	N Total programs surveyed	Did the MPSC or UNOS recommend for an additional focused desk review?		
			No	Yes	
Transplant Recipient	FY2021 Q1	22	17 (77.27%)	5 (22.73%)	
	FY2021 Q2	39	31 (79.49%)	8 (20.51%)	
	FY2021 Q3	22	18 (81.82%)	4 (18.18%)	
	FY2021 Q4	26	20 (76.92%)	6 (23.08%)	
	FY2022 Q1	22	19 (86.36%)	3 (13.64%)	
	FY2022 Q2	31	27 (87.1%)	4 (12.9%)	
	FY2022 Q3	24	18 (75%)	6 (25%)	
	FY2022 Q4	8	7 (87.5%)	1 (12.5%)	
ОРО	FY2021 Q1	2	2 (100%)	0 (0%)	
	FY2021 Q2	1	1 (100%)	0 (0%)	
	FY2021 Q3	1	1 (100%)	0 (0%)	
	FY2021 Q4	0			
	FY2022 Q1	0			
	FY2022 Q2	1	1 (100%)	0 (0%)	
	FY2022 Q3	1	1 (100%)	0 (0%)	
	FY2022 Q4	0			
Living Donor	FY2021 Q1	13	11 (84.62%)	2 (15.38%)	
	FY2021 Q2	11	10 (90.91%)	1 (9.09%)	
	FY2021 Q3	9	8 (88.89%)	1 (11.11%)	
	FY2021 Q4	10	10 (100%)	0 (0%)	
	FY2022 Q1	11	10 (90.91%)	1 (9.09%)	
	FY2022 Q2	17	15 (88.24%)	2 (11.76%)	
	FY2022 Q3	3	3 (100%)	0 (0%)	
	FY2022 Q4	1	0 (0%)	1 (100%)	

Table 6 shows the proportion of focused desk reviews between October 1, 2020, and September 30, 2022, which resulted in either the MPSC or Member Quality recommending an additional follow-up focused desk review. Each quarter around 1 in 5 or 1 in 6 transplant program focused desk reviews resulted in an MPSC or MQ recommendation for an additional focused desk review. During this timeframe zero OPO desk reviews resulting in an additional desk review. Typically, each quarter around 1 in 8 living donor program desk reviews result in a recommendation for an additional desk review.

Table 7. Proportion of transplant recipient programs participating in at least two routine site surveys between January 1, 2016 and December 31, 2022, that increased, decreased, or retained the same compliance rate from their 2nd-most-recent to their most-recent routine survey, by policy and whether the 2nd-most-recent survey resulted in a recommendation for a follow-up focused desk review

Member type	Organ type	Policy	Data type	Yes desk revi	Yes desk review recommendation cohort		No desk review recommendation cohort			Yes Inc. % - No Inc. %
				Decrease	Same	Increase	Decrease	Same	Increase	
Transplant	HR	6.1	Records	2	28	8	7	55	8	10
Recipient		6.1/6.2/6.3/6.4 DEE	Records	22	9	15	35	18	32	
		6.2	Records	1	10	0	5	22	1	
		6.4	Records	1	13	0	0	34	0	
	KI	3.6.C	Records	0	1	0	0	1	0	
		5.3.C	Records	4	42	7	6	52	2	10
		8.4	Records	38	29	30	63	56	7	25
		8.5.A	Records	3	71	6	1	107	5	
		8.5.D	Records	2	16	0	3	12	1	
		8.5.F	Records	11	44	8	19	47	12	
		8.5.G	Records	0	5	0	0	3	0	
	LI	16.6.B Destroying	Records	1	15	5	8	21	3	14
		16.6.C Reporting	Records	10	2	9	19	5	8	18
		9	Records	30	5	24	47	10	20	15
		9.1.A/9.1.B/9.1.C/9.2	Records	3	35	6	2	67	0	14
		9.6/9.2	Records	13	29	15	19	51	7	17
		9.9.B	Records	2	8	5	1	11	0	33
	LU	10.1 DEE (listings)	Records	0	0	0	1	0	0	
		10.1 DEE (variables)	Records	5	0	0	2	1	6	
		10.1 Listings	Records	0	0	0	1	0	0	
		10.1 Variables	Records	2	0	5	5	2	7	
		10.1.A/10.1.B/10.1.C (LU, peds) (Listings)	Records	0	0	0	0	1	0	
	Non-	15.3.B	Records	38	137	47	46	253	16	16
	specified	3.2	Records	14	225	15	17	358	16	
		3.5 (NOL)	Records	48	161	44	70	275	45	
		3.5 (NOR)	Records	44	121	10	59	205	14	
		3.9	Records	24	210	13	43	321	14	
		5.8.B	Records	74	68	102	151	203	18	37

ОРО	ОРО	15.4.A	Records	0	1	1	3	10	2	
		16.5	Records	0	2	0	2	12	1	
		18.1 (PTRs)	Records	1	1	0	7	4	4	
		18.1 (Timeliness DDRs)	Records	1	0	1	5	5	5	
		18.1 (Timeliness feedback)	Records	1	0	1	4	8	3	
		18.1 (noneligible)	Records	0	0	1	4	4	3	
		2.11.B #2c [LI]	Records	0	2	0	2	13	0	
		2.11.C #4 [HR]	Records	0	2	0	0	12	0	
		2.11.D #5 [LU]	Records	0	2	0	0	12	0	
		2.11.E #5 & #6 [PA]	Records	0	1	0	0	9	0	
		2.13 #5	Records	0	2	0	1	11	0	
		2.14.B	Records	1	0	1	3	13	0	
		2.14.C #6	Records	0	1	1	3	10	2	
		2.2 #14	Records	0	1	1	7	3	5	
		2.2 #15	Records	0	2	0	2	13	0	
		2.2 #2	Records	0	2	0	0	15	0	
		2.2 #5	Records	0	2	0	0	15	0	
		2.3	Records	0	2	0	0	15	0	
		2.4	Records	0	2	0	0	15	0	
		2.5	Records	0	2	0	0	14	1	
		2.6.B	Records	0	2	0	5	9	1	
		2.8 #7	Records	1	1	0	4	10	1	
		2.9 #1	Records	0	2	0	2	10	0	
		2.9 #2	Records	0	2	0	0	15	0	
		2.9 #3*	Records	0	2	0	1	12	0	
		Accuracy of Serologies	Records	1	1	0	2	13	1	
Living Donor	LDK	13.4.A (LDK)	Records	0	1	1	1	6	0	
		13.4.C (LDK)	Elements	1	0	1	3	2	1	
		14.4.B	Elements	24	45	10	20	77	5	
	LDL	14.4.C	Elements	3	10	1	7	13	0	
		18.5.B (Accuracy) LI 6 months	Elements	1	3	1	2	2	0	
	Non-	14.1.A	Elements	31	14	48	52	37	33	25
	specified	14.2.A	Elements	13	31	48	39	72	11	43
		14.3	Elements	45	6	41	75	19	28	22
		14.4.A	Elements	52	19	23	76	33	13	14
			Elements Elements	52 6	19 81	23 3	76 6	33 112	13 2	14



14.7	Records	35	27	19	45	56	3	21
18.1 (Accuracy)	Elements	29	13	52	50	31	41	22
18.1 (Timely)	Records	24	49	21	27	76	19	

Table 7 shows the quantity of pairs of all routine transplant recipient site surveys where the program had two routine site surveys between March 1, 2016, and December 31, 2022, where a specific policy was reviewed. It compares the compliance rate of the first (2nd most recent) and second (most recent) surveys within those survey pairs for those policies, and indicates whether those rates decreased, increased, or stayed the same. It also divides survey pairs into two cohorts based on whether a pair's first survey resulted in a recommendation for a desk review. The eight column of the table indicates the percentage point difference between cohorts in the proportion of survey pairs where compliance rate increased. Included and highlighted are policies where there were 10 or more total elements or records reviewed in each cohort, and there was a 10 point or larger difference between cohorts in the percentage of total surveys where there was an increase in policy compliance rates. For all of such policies, the cohort with a desk review between surveys had a greater percentage of increases in policy compliance rates than the non-desk review cohort.