

OPTN Offer Acceptance Collaborative Executive Report

Background

Organ offer acceptance processes are integral to the donation and transplant system, yet there is considerable variation in offer acceptance rates for transplant programs across the nation. Effective acceptance practices promote improved system performance which can lead to increased transplants. In July 2023, the OPTN Membership and Professional Standards Committee began reviewing offer acceptance metrics as part of its enhanced transplant program performance monitoring system.

The OPTN Offer Acceptance Collaborative sought to address the variation in offer acceptance and improve offer acceptance rates at both the individual program and community levels. Eighty-three transplant programs nationwide voluntarily joined this collaborative and focused performance improvement efforts across four key areas: revising and defining acceptance criteria, optimizing the response to organ offers, performing retrospective reviews, and strengthening waitlist management processes.

Methodology

The Collaborative Improvement (CI) team utilized a collaborative framework, based on the Institute for Healthcare Improvement's Breakthrough Series Collaborative Model, to deploy this project through the following phases:

Design and Pre-Work: (August 2022 – January 2023)

Effective offer acceptance practices were gathered through key informant interviews with 12 adult and pediatric transplant programs in order to develop an Improvement Guide. This resource included potential interventions for programs to implement to effect change based on the key drivers mentioned above. Upon determination of the project framework and scope, 83 transplant programs (49 kidney, 12 liver, 17 heart, 5 lung) enrolled in the effort and were oriented to the collaborative improvement framework, process improvement methodology, and the goals of the initiative during an in-person project kickoff conference on January 31 – February 1, 2023. A complete list of project participants can be found in Appendix A.

Engagement: (February 2023 – July 2023)

Participants established individual project aims to contribute to the cohort goal and developed project charters to map out Quality and Performance Improvement (QAPI) initiatives. Some programs chose to focus on one change concept, while many worked on changes in multiple areas.

Utilizing an "All Teach, All Share, All Learn" framework, participants interacted through a web-based project platform with discussion boards, resources, and data dashboards. Performance improvement specialists provided individualized coaching to participants as they worked through their respective QAPI projects, and routinely facilitated interactive webinars and collaborative calls.

Evaluation: (August 2023 – December 2023)

Data were analyzed on the performance of each participating transplant program, of the collective cohort, and the overall project effort. Preliminary project data was shared during the final collaborative webinar and updated results can be found below.

Results

Collaborative participants' progress was compared to the rest of the nation using the following measures:

Outcome Measures

Each organ-specific group had a collective goal to increase offer acceptance rates during the active engagement period (February 2023 – July 2023) compared to the pre-engagement period (August 2022 – January 2023). Kidney, liver, and heart cohorts showed increases in offer acceptance rates.

SRTR Offer Acceptance Ratio

As mentioned previously, the MPSC recently began monitoring transplant program offer acceptance ratios, which measure whether a program was more or less likely to accept offers than expected based on risk-adjusted data. A greater percentage of collaborative participants across all organ groups experienced improvement in offer acceptance ratios compared to programs in the rest of the nation.

Balancing Measures

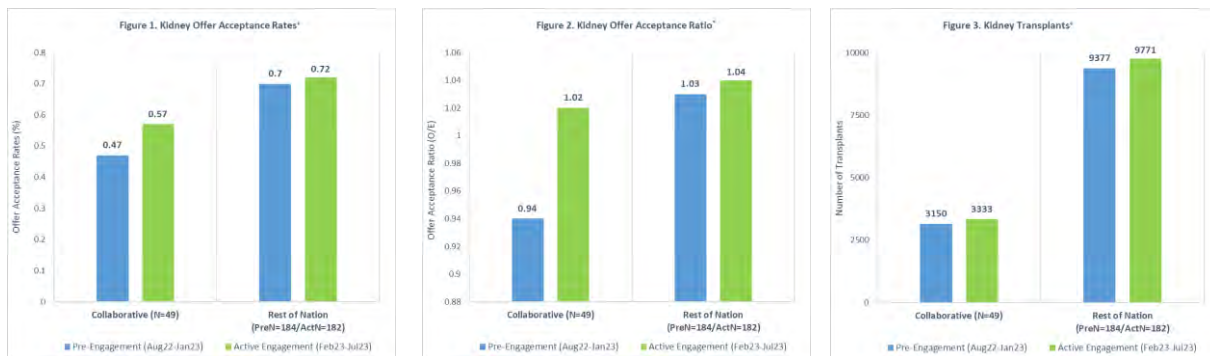
While the goal of the collaborative was to increase offer acceptance rates, it was important to make sure these improvements did not cause unintended consequences in other areas. The number of transplants were evaluated as a balancing metric. All organ group cohorts showed increases in transplant volume.

Kidney

The kidney cohort goal was to increase offer acceptance rates by 20%. During the active engagement period, participants surpassed their collective aim by increasing their offer acceptance rates by 21%, while the rest of the nation increased by 3% (Figure 1).

The collaborative offer acceptance ratio increased by 6% during the active engagement period, while the rest of the nation increased by 1% (Figure 2). Thirty out of 49 collaborative kidney programs (61%) and 96 programs in the rest of the nation (52%) experienced offer acceptance ratio improvement from the pre-engagement to active engagement periods.

The number of kidney transplants increased by 6% between the pre- and active-engagement periods, while the rest of the nation experienced a 4% increase in kidney transplants between the same time periods (Figure 3).



*Based on OPTN data as of November 17, 2023. Data subject to change based on future data submission or correction.

*Based on SRTR data as of December 8, 2023. Data subject to change based on future data submission or correction.

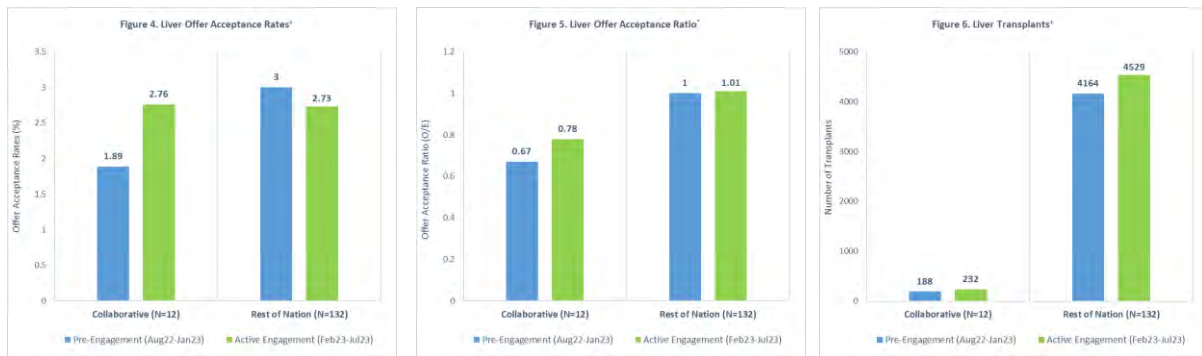
Additionally, kidney programs can filter offers based on their program’s previous organ offer acceptance behavior. During the pre-engagement period, 57% of participating kidney programs implemented offer filters, compared to 45% of programs in the rest of the nation. During active engagement, 90% of participating programs were using filters, compared to 54% of the rest of the nation.

Liver

The liver cohort goal was to increase offer acceptance rates by 15%. During the active engagement period, participants surpassed their collective aim by increasing their offer acceptance rates by 46%, while the rest of the nation decreased by 9% (Figure 4).

The collaborative offer acceptance ratio increased by 16% during the active engagement period, while the rest of the nation increased by 1% (Figure 5). Nine out of 12 collaborative liver programs (75%) and 64 programs in the rest of the nation (47%) experienced offer acceptance ratio improvement from the pre-engagement to active engagement periods.

The number of liver transplants increased by 22% between the pre- and active-engagement periods, while the rest of the nation experienced an 9% increase in liver transplants between the same time periods (Figure 6).



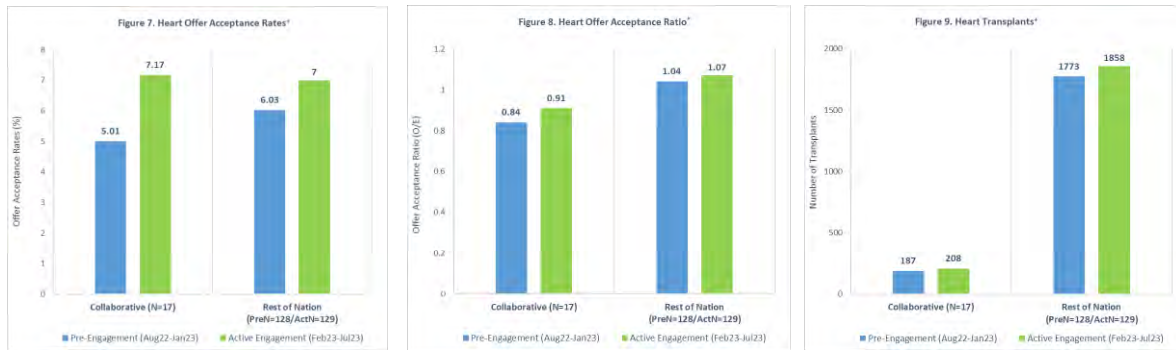
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Heart

The heart cohort goal was to increase offer acceptance rates by 15%. During the active engagement period, participants surpassed their collective aim by increasing their offer acceptance rates by 43%, while the rest of the nation increased by 16% (Figure 7).

The collaborative offer acceptance ratio increased by 8% during the active engagement period, while the rest of the nation increased by 3% (Figure 8). Eleven out of 17 collaborative heart programs (65%) and 73 programs in the rest of the nation (57%) experienced offer acceptance ratio improvement from the pre-engagement to active engagement periods.

The number of heart transplants increased by 11% between the pre- and active-engagement periods, while the rest of the nation experienced a 5% increase in heart transplants between the same time periods (Figure 9).



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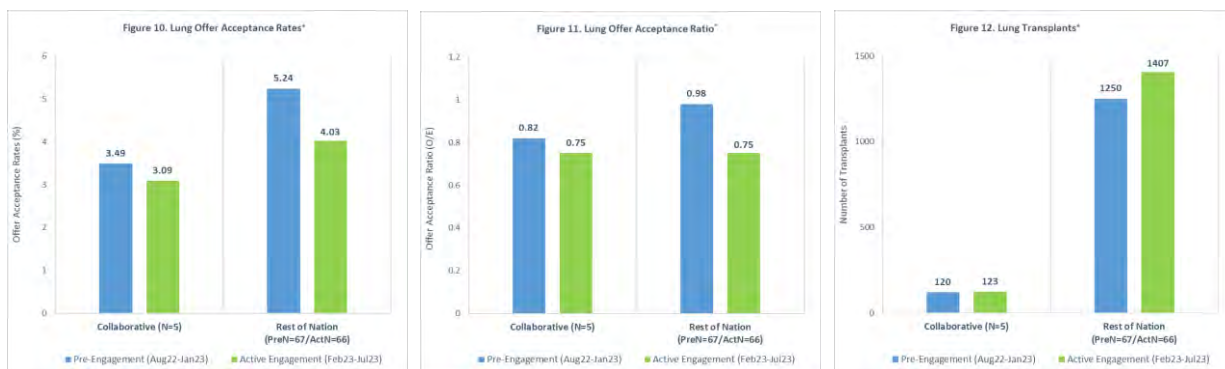
Lung

The lung cohort goal was to increase offer acceptance rates by 15%. During the active engagement period, the cohort offer acceptance rate decreased by 11%, while the rest of the nation decreased by 23% (Figure 10).

The collaborative offer acceptance ratio decreased by 9% during the active engagement period, while the rest of the nation decreased by 23% (Figure 11). Three out of 5 collaborative lung programs (60%) and 16 programs in the rest of the nation (24%) experienced offer acceptance ratio improvement from the pre-engagement to active engagement periods.

The number of lung transplants increased by 3% between the pre- and active-engagement periods, while the rest of the nation experienced a 13% increase in lung transplants between the same time periods (Figure 12).

Of note: the OPTN implemented Lung Continuous Distribution policy on March 9, 2023, which was during the active engagement period.



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Project Analysis

The Offer Acceptance Collaborative was launched as part of the OPTN contract under Task 3.6.6 and offered an opportunity for the CI team to test and improve collaborative project structures and processes. Throughout the course of the project, participants provided feedback on the overall initiative.

Participants reported that the project kickoff conference and monthly collaborative calls were the most beneficial aspects of the project. Most participants indicated their desire to participate in future OPTN collaborative efforts. Participant feedback will be incorporated to improve future collaborative offerings.

Conclusion

Collaborative learnings and results continue to be shared with the community through webinars, presentations, and conferences. As the value and community interest in collaborative improvement efforts is favorable, the CI team will continue to assess relevant topics for potential initiatives.

Appendix A: Participating Transplant Programs

**Indicates Key Informant Interviewee*

Code	Name	Organ
ALCH	Children's of Alabama	Liver
ALUA	University of Alabama at Birmingham Hospital	Lung
AZCH	Phoenix Children's Hospital	Liver
AZGS	Banner University Medical Center Phoenix	Kidney
AZMC	Mayo Clinic Hospital of Arizona*	Kidney
CACH	Rady Children's Hospital	Kidney
CALL	Loma Linda University Medical Center	Kidney
CAPC	Lucile Packard Children's Hospital	Heart
CAPM	California Pacific Medical Center	Kidney
CASD	UC San Diego Health*	Kidney
CASF	University of California San Francisco	Kidney
CASJ	St. Joseph Hospital	Kidney
CAUH	Keck Hospital of USC	Kidney
COCH	Children's Hospital of Colorado	Kidney
DCWH	Medstar Washington Hospital Center	Heart
DECC	Christiana Care Health Services	Kidney
FLFH	Advent Health Orlando	Kidney
FLMR	Memorial Regional Hospital	Heart
FLSL	Mayo Clinic Hospital of Florida	Lung
FLTG	Tampa General Hospital	Lung
GAPH	Piedmont Hospital	Heart
ILCM	Ann & Robert H. Lurie Children's of Chicago	Heart
ILNM	Northwestern Memorial Hospital	Heart
ILSF	OSF Healthcare Saint Francis Medical Center	Kidney
ILVA	Edward Hines Jr. VA Hospital	Kidney
KYUK	UK Healthcare	Kidney
LAWK	Willis-Knighton Health System	Kidney
MABI	Beth Israel Deaconess Medical Center	Liver
MACH	Boston Children's Hospital	Heart
MAUM	UMass Memorial Medical Center	Kidney
MICH	Children's Hospital of Michigan	Heart
MIHF	Henry Ford Transplant Institute	Kidney
MISH	Spectrum Health	Heart
MISJ	Ascension St. John	Kidney
MNAN	Abbott Northwestern Hospital	Kidney
MNMC	Mayo Clinic Hospital Minnesota	Kidney
MNUM	University of Minnesota Medical (Fairview Health)	Heart
MOBH	Barnes-Jewish Hospital	Kidney
MOCH	St. Louis Children's Hospital	Liver
MOLH	Saint Luke's Hospital of Kansas City	Heart
MOUM	University of MU Hospital	Kidney

MSUM	University of Mississippi Medical Center	Kidney
NCDU	Duke University Hospital	Kidney
NCEC	ECU Health Medical Center	Kidney
NDSL	Sanford Health Fargo	Kidney
NJBI	Newark Beth Israel Medical Center	Heart
NJHK	Hackensack University Medical Center	Kidney
NJLL	Virtua Our Lady of Lourdes Hospital	Liver
NJSB	Cooperman Barnabas Medical Center	Kidney
NMPH	Presbyterian Hospital	Kidney
NYCP	New York Presbyterian	Lung
NYDS	SUNY Downstate Medical Center	Kidney
NYFL	University of Rochester Medical (Strong Memorial)	Liver
NYMA	Montefiore Transplant Center	Kidney
NYMS	The Mount Sinai Hospital	Kidney
NYNY	New York-Presbyterian/Weill Cornell	Kidney
OHCH	Nationwide Children's Hospital	Liver
OHOH	Ohio State University Medical Center*	Kidney
OHTC	The Christ Hospital	Kidney
OHUC	University of Cincinnati Medical Center	Heart
OKBC	INTEGRIS Health - Baptist Medical Center	Lung
PAAE	Albert Einstein Medical Center	Kidney
PACH	UPMC Children's Hospital	Liver
PACP	Children's Hospital of Philadelphia	Kidney
PAHE	Penn State Health Milton S. Hershey Medical Center	Heart
PAHH	UPMC Pinnacle at Harrisburg Hospital	Kidney
PAPT	University of Pittsburgh Medical Center	Liver
PATJ	Thomas Jefferson University Hospital	Heart
PATU	Temple University Hospital	Kidney
PAUP	Hospital of the University of Pennsylvania	Kidney
PAVA	VA Pittsburgh Healthcare System	Kidney
SCPG	Prisma Health	Kidney
TNBM	Baptist Memorial Hospital - Memphis	Heart
TNEM	Erlanger Health System	Kidney
TNVU	Monroe Carell Junior Children's Hospital at Vanderbilt	Liver
TXHH	Memorial Hermann Hospital, University of Texas at Houston	Kidney
TXHI	Baylor St. Luke's Medical Center	Kidney
TXPM	Parkland Health and Hospital System	Kidney
TXTC	Texas Children's Hospital	Kidney
TXVA	Michael E DeBakey VA Medical Center	Liver
UTPC	Primary Children's Hospital	Kidney
WACH	Seattle Children's Hospital*	Liver
WASH	Providence Sacred Heart Medical Center	Heart