In alignment with our mission to lead the nation’s organ donation community to save more lives, the Association of Organ Procurement Organizations (AOPO) commits to achieving 50,000 organ transplants annually by 2026. AOPO and its members will work with key stakeholders toward our collective vision to pursue the day when every donation opportunity results in lives saved by implementing a series of initiatives:

1. Expand **Collaboration** across the AOPO membership and among all stakeholders
2. Reduce **Health Inequities** to improve accessibility of organ transplants in minority communities
3. Maximize **Organ Utilization** by transplant programs
4. Drive **Innovation** to increase donation and maximize transplantation

Reaching this goal will necessitate focused performance improvement in all aspects of organ donation and transplantation, from the early interaction of caregivers with donors and donor families to the transplant and care for patients receiving the gift of donation. Especially important will be to increase the number of donation after circulatory death (DCD) donors and the utilization of organs from this donor type. AOPO believes a coordinated approach using innovative technologies and known successful practices will enable us to increase donors and optimize all donation opportunities.

AOPO is dedicated to achieving 50,000 transplants by improving the donation and transplantation system in a collaborative manner. With sustained, incremental growth in donation over the past six years, the measure of OPO performance relies on an integrated system to continue saving more lives. We recognize that OPOs are one piece of a larger system and true success comes from hospitals, OPOs, and transplant programs working together towards this common goal. By expert stakeholders working together to identify and fix issues within the system, we will ensure our organ donation and transplantation system remains the best in the world.
Key Initiatives Implementation

1. EXPAND COLLABORATION

- Work together as dedicated partners within the OPO community to transfer knowledge and learn successful practices to achieve shared goals.
- Use data shared within the OPO community to identify areas for individual OPOs to improve their operations to ensure every donation opportunity is maximized.
- Develop, in conjunction with the Department of Health and Human Services (HHS), a Learning Collaborative focused on improving donation authorization, organ utilization, organ allocation, and the use of modern technology throughout the donation process.

2. REDUCE HEALTH INEQUITIES

- Make health equity an OPO priority.
- Use the recommendations from the AOPO Diversity, Equity, and Inclusion (DEI) Task Force to guide donation and transplant professionals to achieve fairness, equity, and transparency in deceased donor organ procurement, allocation, and distribution.
- Enhance and expand OPO cultural and implicit bias training.
- Develop data-driven policies and support research to advance health equity in organ donation and transplantation.
- Partner with the Association of Multicultural Affairs in Transplantation (AMAT) and other external stakeholders to develop national outreach efforts for communities of color to encourage organ donation and to address concerns with the organ donation and healthcare system.

3. MAXIMIZE ORGAN UTILIZATION

- Advocate for regulatory and financial reforms designed to increase utilization of organs from older and more complex donors.
- Educate stakeholders on regulatory and financial reforms designed to increase utilization of organs from older and more complex donors.
- Align organ procurement organization (OPO) and transplant program performance measures to maximize utilization of organs by transplant programs made available for transplant by OPOs.
- Develop performance metrics for transplant programs that incorporate organ offer acceptance rates and increased transplants.
- Provide public transparency and accountability for organ utilization by all collaborators of the system.

4. DRIVE INNOVATION

- Partner with donor hospitals to implement electronic referrals systemwide to ensure timely identification of every opportunity for donation.
• Drive utilization of existing innovations in organ perfusion and advocate for investment in new technologies to increase the quality of organs made available for transplant and expand the utilization of organs from all types of donors.
• Support new research to improve donation rates and improve transplant outcomes, focusing on increasing the number of DCD donors and the utilization of organs from this donor type.

Collaboration

BACKGROUND

Collaboration has been at the heart of organ donation improvement for nearly two decades. The Health Resources and Services Administration (HRSA) Collaborative in 2003 brought together the three key stakeholders in organ donation on a national basis: Donor Hospitals, OPOs and Transplant Programs. To this day, essential stakeholders strive to collaborate to remain the best performing donation and transplant system in the world. Collaboration, both within the OPO community and with other stakeholders, is at the heart of AOPO's plan to grow organ transplantation to 50,000 by 2026.

OPO COLLABORATIVE PRINCIPLES

• Work as dedicated partners to transfer knowledge and share successful practices.
• Analyze OPO data and develop data-driven strategies for each OPO to drive performance improvement in all areas.
• Expand support to underperforming OPOs by providing guidance on how to operationalize new strategies to increase donation and transplantation.
• Partner with all key stakeholders to administer a comprehensive learning collaborative focused on systemwide improvements for organ donation and transplantation.

COMPREHENSIVE SYSTEMWIDE COLLABORATIVE

In 2019, HHS began planning for a new Learning Collaborative aimed at increasing the number of kidneys available for transplant. To achieve the goal of 50,000 organs transplanted by 2026, AOPO will work with HHS and all stakeholders to broaden the proposed collaborative initiative to focus on systemwide improvement for organ donation and transplantation. The OPO community's commitment will include full participation in all collaborative activities and financial support for the program. Additionally, AOPO will advocate for federal funding to maximize participation. The cost savings gained from removing patients from dialysis through increased kidney transplantation alone will result in cost savings for the federal kidney program.

In partnership with HHS, the **50,000 Organ Transplant Learning Collaborative** will be a formal, concerted effort of the donation and transplantation community to increase the number of organs transplanted nationwide. It will be an intensive, focused, and deliberate initiative designed to facilitate breakthrough transformation in performance of OPOs, Donor Hospitals and Transplant Programs together as a system to reach the goal of 50,000 organ transplants. Together with these stakeholders, AOPO will engage and support the concepts and successful practices that will transform the donation system to ensure that every suitable donor is evaluated for donation, every donor designation is honored, every potential donor family is sensitively offered the
opportunity of donation, and all donors are expertly managed through the process including focused allocation so that every organ possible is transplanted.

OPOs, Donor Hospitals, and Transplant Programs will send multidisciplinary teams to participate in an intensive series of Collaborative Learning sessions and commit to Action Periods. We propose sessions occur from September 2021 to May 2024. Drawing from the experience of practitioners with high donation and organ utilization rates, these teams will work together to rapidly learn, adapt, redesign, test, implement, track, and refine processes to achieve increased donation rates and optimal organ utilization rates.

AOPO envisions five focused areas of action to create high performance in organ donation and transplantation.

1. **INCREASE DONATION AUTHORIZATION**
   Obtaining an authorization for deceased donation is essential to reach the goal of 50,000 organs transplanted. AOPO will partner with stakeholders to identify and advocate for the most successful practices to increase donation authorization. There will be special emphasis on sharing successful practices to increase donation in multi-cultural communities, including increased awareness activities focused on health equity, intentional educational efforts of ethnic and racial minority communities encouraging donor designation, and enhancing family discussions regarding donation. Additional efforts will be made to honor donor designation in all donation instances, especially in DCD cases.

2. **OPTIMIZE RESOURCE DEPLOYMENT**
   To reach the goal of 50,000 organs transplanted, AOPO is committed to helping all OPOs identify and optimally use resources available to ensure that every potential donor is converted. This includes studying successful staffing and training models, mentorship programs, and successful practices for trained staff retention. Collaborations will include optimization of referral management systems to ensure appropriate OPO staff will be in the “right place at the right time” to offer the option of donation to every potential donor family.

3. **INCREASED ORGAN UTILIZATION**
   Every viable organ needs to be effectively utilized while ensuring optimal outcomes. There are considerable disparities between transplant programs regarding transplant rates and organ acceptance practices. AOPO will work with stakeholders to evaluate center acceptance and refusal practices and highlight the successful practices of high performing transplant centers. Collaboration with regulators will include creating incentives for Transplant Programs with high utilization rates and increased utilization of moderate to high KDPI kidneys. This will include assessment of the impact of shorter time to transplantation and improvements needed for organ allocation, expedited placement, and recovery to reduce organ cold ischemic time.

4. **IMPROVED EFFICIENCY OF ORGAN ALLOCATION**
   Together with stakeholders, AOPO will explore opportunities to enhance the efficiency and optimize logistics of the national organ allocation system. The goal is to remove obstacles to transplantation, such as organ acceptance, to increase efficiency in organ allocation practices, thereby reducing cold ischemic time, improving patient outcomes, and increasing organ utilization.
5. ENHANCED UTILIZATION OF TECHNOLOGY
The Collaborative should prioritize and support the use of organ perfusion technologies and medical innovations that will increase donors and organs available for transplantation. This includes the use of innovative technology and software that will allow for the programmed referral of all potential donors though the automated transfer of data from electronic health records directly from Donor Hospitals to OPOs. Additionally, we will seek ways to advance the use of technology for enhanced organ allocation and organ tracking.

Reduce Health Inequities

To reach the goal of 50,000 organ transplants annually by 2026, improvements must be made in donation and transplantation among communities of color. AOPO recognizes there are clear and compelling racial disparities in organ donation and transplantation. AOPO is committed to working with stakeholders to enact solutions that rectify inequity through multidivisional approaches that address fundamental causes and to create a health equity framework where people have access to life-saving treatment irrespective of geography, race, ethnicity, sexual orientation, income and other social conditions.

BACKGROUND

Health disparities adversely affect groups of people who have systematically experienced greater social or economic obstacles to health based on their racial or ethnic group. Disparities in organ donation reflect the current state of larger social, economic, and political inequities. Communities of color are known to suffer greater disease burden but have less access to care, experience bias in healthcare settings, and have a higher level of distrust of the healthcare establishment. All these factors contribute to reduced access to life-saving organs for these communities.

AOPO is committed to working with stakeholders to advocate for and develop solutions that address disparities in donation and transplantation in communities of color, with a special emphasis on sharing successful practices to increase donation in multi-cultural communities.

AOPO DIVERSITY, EQUITY, AND INCLUSION (DEI) TASK FORCE

AOPO will continue the work of the DEI Task Force to provide valuable insight to guide AOPO and the broader OPO community in developing a more diverse, equitable, and inclusive environment for all donor families, recipients, transplant wait-listed individuals and OPO staff. Areas of focus include:

1. Define diversity and inclusion for AOPO and its membership.
2. Identify how AOPO can raise awareness of and foster diversity and inclusion within the OPO community.
3. Determine how AOPO can instill diversity and inclusion on an ongoing basis within its programs and services.
4. Develop data-driven metrics and policies by which OPOs and AOPO can gauge progress towards improving diversity and inclusion within the membership.
**TRAINING OF OPO STAFF**

AOPO will develop innovative communications training for OPO staff, with emphasis on improving cultural competencies to eliminate implicit bias and to speak with minority communities about organ donation. OPOs will be encouraged to hire a more diverse workforce to meet the needs of these communities.

**OUTREACH AND EDUCATION**

AOPO will work with AMAT and other stakeholders to develop effective nationwide outreach and education programs for communities of color to encourage organ donation. AOPO will work to increase the number of minority donors by addressing issues of awareness of organ donation and transplant, mistrust of the healthcare system, religious concerns, and other factors influencing the decision to become an organ donor. The goal is to diversify the donor registry by educating communities about the donation process and encouraging people of minority ethnicity to register as organ, eye, and tissue donors.

The above outreach and education will foster trust that eventually increases the potential donor pool and encourages people of color to add their names to the transplant wait list, initiating systemic change for both donation and transplantation.

**Organ Utilization**

A key component to better serve patients in end-stage organ failure is to increase systemwide accountability and create incentives to better utilize organs that are gifted by donors and offered for transplant by OPOs. AOPO plans to advocate for systemwide education, regulatory changes, and collaborations to achieve higher use of the precious gift of donation.

**BACKGROUND**

Transplant programs make the ultimate decision whether to utilize organs that OPOs make available and are directly responsible for the patients in their care who need a life-saving organ transplant. Increasing transplant utilization rates of organs from older and more complex donors will incentivize OPO pursuit and recovery of organs from this pool of donors. Reform is needed to ensure barriers to utilization are removed, appropriate incentives to use more organs are created, and to ensure that all system stakeholders are accountable for organ utilization.

In the last six years, the increase in donors, kidneys transplanted, and kidneys not utilized after being offered for transplant by OPOs are:

<table>
<thead>
<tr>
<th></th>
<th>2014</th>
<th>2020</th>
<th>Change</th>
<th>% Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Deceased Organ Donors</td>
<td>8,596</td>
<td>12,588</td>
<td>3,992</td>
<td>46%</td>
</tr>
<tr>
<td>Kidneys Transplanted</td>
<td>12,561</td>
<td>17,583</td>
<td>5,022</td>
<td>40%</td>
</tr>
<tr>
<td>Kidneys Offered By OPOs not Utilized by Programs</td>
<td>2,888</td>
<td>5,049</td>
<td>2,161</td>
<td>75%</td>
</tr>
</tbody>
</table>

*Source: United Network for Organ Sharing*
The non-utilization rate of kidneys made available by OPOs is above 20% and rising rapidly. In fact, between 2018 and 2020 non-utilized kidney numbers increased 34%.

EDUCATION OF STAKEHOLDERS

For much of the past decade, transplant professionals have pointed to regulatory and financial barriers to the use of certain organs. However, several regulatory changes to reduce organ utilization disincentives have been implemented recently, but with minimal impact. On September 30, 2019, the Center for Medicare and Medicaid Services (CMS) issued a Final Rule known as the “2019 Burden Reduction Final Rule” that effectively eliminated the one-year survival rate metric used to hold programs accountable for patient transplant outcomes. This metric created a disincentive to utilize organs from older and more complex donors as the organs are at higher risk of not functioning at the one-year mark. The United Network for Organ Sharing (UNOS) also revised its outcome measures in 2018 to evaluate transplant programs performance on their outcomes from lower kidney donor profile index (KDPI) kidney transplants (< 85 KDPI), thus eliminating any perceived disincentive to utilize kidneys from older and more complex donors.

Furthermore, on October 1, 2020 new CMS payment regulations went into effect providing higher reimbursement for complex kidney transplants that require additional dialysis, which is often the case when high KDPI kidneys are transplanted, to eliminate financial disincentives for transplant programs.

Nonetheless, the rates of non-utilization of kidneys offered by OPOs continue to climb. More must be done to hold the system accountable for utilizing organs that are donated and made available by OPOs for transplant. AOPO will work with the transplant community to ensure all stakeholders understand the current regulatory rules and debunk misconceptions about the risks of organ utilization versus waiting for the perfect organ.

ALIGNMENT OF REGULATIONS

The new OPO regulations are specifically steering OPOs to recover and offer more organs from complex donor groups in order to increase organ donation rates and transplant events. This inherently requires transplant centers to expand organ acceptance criteria to increase transplant rates. Furthermore, organ allocation algorithms continue to evolve with favoring the sickest first. The systems are not aligned to assure that these new OPO regulations will yield the desired result, while making OPOs accountable for metrics not all within their control. This misalignment must be addressed to systematically benefit patients waiting for transplant. In fact, one of the priorities of this initiative will be to identify high variabilities within the donation and transplantation system and work to eliminate these variabilities. AOPO will work with HHS, UNOS and the transplant community to align transplant program regulations and metrics with OPO regulations and metrics.

Performance standards related to transplant programs as currently designed do not incentivize increased organ acceptance or risk taking for expanded criteria donors. Public reporting by the Scientific Registry of Transplant Recipients (SRTR) and star rating as well as flagging by the Organ Procurement and Transplantation Network (OPTN)/Membership and Professional Services Committee (MPSC) have had adverse consequences on organ utilization. It has been shown that organ acceptance has been greatly reduced during the time period following an MPSC flag. Furthermore, SRTR 5-star ratings have had unintended consequences on organ utilization with added punitive actions from private payers. The community has advocated for a process improvement methodology with OPTN/MPSC to accomplish the goal of increased organ acceptance and implantation, while
trying to define what is considered an acceptable outcome. Within the SRTR star system, a 1/5-star rating still achieve 92% 1-year survival.

In an ever-changing field, innovations in organ recovery, preservation and modulation are becoming a reality. These innovations will allow the use of organs considered to date as unsuitable. However, utilization of such organs, while indeed presenting an opportunity for more transplants, require risk taking both from the OPO and transplant center, when both are made accountable for outcomes. Regulations need to accommodate such innovations and allow for mechanisms for exemption from outcomes reporting until outcomes and expectations are better defined. Furthermore, such innovations will increase costs both in organ preservation and transplantation. Hence accommodations from CMS will need to occur to cover such added expenses and bring innovations to reality.

Ultimately, organ placement, acceptance and transplantation are a joint responsibility of the OPO and Transplant Center communities that exist within the same transplant ecosystem. Achieving the best outcomes will require joint efforts and joint accountabilities to regulatory agencies and especially the public at large. AOPO is committed to working with the transplant surgery community and the American Society of Transplant Surgeons (ASTS) to optimize organ recovery and placement more effectively and efficiently. In addition, AOPO will collaborate with the MPSC and SRTR in defining optimal metrics to ascertain maximization of organ utilization.

AOPO will lead the work on regulatory changes that remove barriers, encourage higher utilization, and provide transparency and accountability for all participants in the transplant community. All participants in the system working in partnership with one another, have the potential to save more lives by instituting a series of systemwide reforms to ensure that viable organs made available by OPOs are transplanted at higher utilization rates. Maximizing organ utilization benefits patients waiting for a life-saving transplant and honors the gifts made by donors and their families.

Innovation and Research

To achieve the lifesaving goal of 50,000 organ transplants by 2026, AOPO will advocate for innovative strategies and modalities to maximize and optimize organ referral, organ recovery, and organ preservation. We will promote, support, and participate in research to explore innovative strategies to further advance the areas outlined above as well as initiatives to counter health disparities in transplantation.

BACKGROUND

Innovation has been a key component of the massive growth in donation and transplantation over the past 25 years. Advancements in transplantation techniques, anti-rejection therapies, and patient care improved early outcomes for patients and expanded the number of transplants. Medical innovations like the cure for Hepatitis C and the utilization of organs from DCD donors have allowed the expansion of eligible donors. Technologies already available and others in development hold great promise to increase transplantation.

AOPO is committed to advocating for innovative strategies in the following areas:
ELECTRONIC DONOR REFERRAL

Effective potential donor referral processes are critical to successful donation outcomes and OPOs rely on hospital partners to refer potential donors in a timely fashion. Due to the manual nature of most referral systems between hospitals and OPOs, there is opportunity to enhance this critical process through innovation and the implementation of electronic donor referrals. AOPO is committed to advocate for electronic donor referrals and work with stakeholders to achieve this goal.

NEXT GENERATION PERFUSION TECHNOLOGIES

We now have normothermic perfusion devices for hearts, lungs, and livers. These technologies, which preserve organs for longer periods of time, are especially important during DCD. In 2020, DCD donations increased by 18.6% over 2019 and this trend will continue with advancements in perfusion technologies. AOPO is committed to advocate for expansion of wide-spread utilization in innovative perfusion technologies.

SAFE, TIMELY ORGAN TRANSPLANTATION THROUGH INNOVATIVE TECHNOLOGY

The OPTN has policies in place to provide guidance to OPOs transporting organs between destinations, which includes an extensive documentation process. OPOs are also currently partnering with charter/courier companies, delivery companies such as UPS, and drone-based projects to implement new technologies to track organs in transit. In addition, UNOS has an Organ Tracking Project underway with five OPOs that uses tracking technology to improve transportation and delivery of organs. Innovations like this are helping to enhance organ transportation across the nation and AOPO is committed to advocate for advances and utilization of new technologies for safe and efficient transportation.

RESEARCH FOR ADVANCES IN INNOVATIVE STRATEGIES AND HEALTHCARE EQUITY

AOPO will leverage the synergy created through the work of its Organ Donation Research Council (ODRC) as well as explore research opportunities with industry stakeholders to identify innovative strategies specific to optimizing donor management, preservation, and more. Current projects and opportunities include successful practices in DCD liver recovery and the exploration of the OPO’s role in supporting research for bioengineering of organs. AOPO is a partner in the National Institute of Health (NIH) APOLLO study which investigates the impact of a common gene (APOL1) found in individuals of African descent that attributes to higher cases of kidney disease. The research aims to address health disparities in this community by improving kidney donation and transplant outcomes.

Through partnerships with federal regulators, donor hospitals, transplant programs, and public advocacy groups to execute the above initiatives, AOPO commits to saving more lives than ever before – achieving 50,000 organ transplants annually by 2026.