



ESRD Treatment Choices Learning Collaborative  
*The CMS/HRSA Kidney Donation & Transplant Initiative*

# ESRD Treatment Choices Learning Collaborative (ETCLC)

**Kidney Transplant Change Package**

**July 2025**

## Introduction

The 2025 Kidney Transplant Change Package reflects the knowledge gained from the ETCLC and focuses on effective practices employed by high-performing kidney transplant centers and organ procurement organizations (OPOs). It includes the use of a “driver diagram” format with eight “drivers” to simplify the presentation of strategies and concentrates on actionable change ideas that work to achieve the three ETCLC National Aims:

- Aim 1: Increase the number of deceased donor kidneys transplanted.
- Aim 2a: Decrease the current national nonuse rate for all procured kidneys with a kidney donor profile index (KDPI) < 60.
- Aim 2b: Decrease the current national nonuse rate of all procured kidneys with a KDPI  $\geq$  60.
- Aim 3: Increase the number of deceased donor kidneys recovered with a KDPI  $\geq$  60.

For the purposes of this change package, KDPI kidneys  $\geq$  60 have been categorized as “medically complex” kidneys. The term medically complex is intended to refer to those kidneys that should be transplanted into select individuals based on donor characteristics. Medically complex kidneys may not be suitable for all individuals but are appropriate for medically suitable recipients. These kidneys may require extra effort to identify a suitable recipient due to one or more factors (e.g., expected graft longevity, anatomy, infectious disease risk). The characteristics of a medically complex kidney stand in contrast with other kidneys (KDPI < 60) recovered for transplant. Kidneys with a KDPI < 60 should be transplantable into most individuals based on optimal donor characteristics that would benefit most patients.

The ETCLC’s work suggests that the key to reducing the nonuse rate and increasing the number of deceased donor kidneys transplanted can best be achieved by increasing transplant program capacity and willingness to grow at rates higher than the current average rate (about 7% annually).

Transplant centers, OPO leadership, midlevel managers, and frontline staff are all encouraged to review this edition, assess the actions for adoption, and implement strategies to improve performance and achieve higher levels of growth while reducing kidney nonuse rates.

## Transplant Change Package—June 2025

Driver	Action Item
<b>1. Secure the Right Leadership</b>	<p><i>The OPO and transplant center executive leadership accept ownership of the transplant process and commit to establishing targets for growth and outcomes.</i></p> <ul style="list-style-type: none"> <li>i. Leadership conducts annual strategic planning to establish bold goals for kidney transplantation growth that are measurable and included in overall hospital and OPO strategic plans.</li> <li>ii. Ensure hospital and kidney transplant program leadership are aligned with organizational goals and mission. <ul style="list-style-type: none"> <li>a. Define realistic annual goals for growth in deceased donor transplants and adapt program processes, including the implementation of a documented Quality Assurance and Performance Improvement (QAPI) program to improve program quality, patient experience of care, and clinical outcomes.</li> </ul> </li> <li>iii. Create the case for growth needed to secure the necessary resources defined by transplant program leadership. Example cases may include: <ul style="list-style-type: none"> <li>a. Identify local patient needs (e.g., physical, mental and education) and determine the growth capacity required to serve the population (e.g., older population with complex co-morbidities may require greater post-transplant care) and align resources accordingly.</li> <li>b. Know the fiscal impact of the kidney transplant program to the hospital and position the program to receive additional resources.</li> <li>c. Establish a team goal to become a recognized local and/or national leader in kidney transplant to enhance the organizational reputation.</li> </ul> </li> <li>iv. Hire, manage, and encourage staff to function as a high-performing OPO and transplant program team to execute and achieve the goals set forth in the strategic plan. <ul style="list-style-type: none"> <li>a. Use proven recruitment and retention strategies to align new hires with a strategic plan for growth and build the right team.</li> <li>b. Provide a full onboarding process and provide ongoing education on advances in transplantation methods and technologies.</li> <li>c. Recruit and retain clinicians committed to quality care and whose risk tolerance aligns with transplant center expectations.</li> <li>d. Recruit and retain physicians with the commitment and expertise to accept and manage medically complex kidneys.</li> </ul> </li> </ul>

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	<ul style="list-style-type: none"> <li>v. Secure hospital leadership commitment to provide sufficient resources to achieve targets, including: operating room (OR) space, intensive care unit (ICU) space, clinic space, patient rooms, surgeons, nephrologists, and dialysis support.</li> </ul>
<b>2. Establish a Culture of Accountability</b>	<p><i>The OPO and transplant center leadership define and establish a culture of accountability in which team members are held accountable for working together to achieve goals and resolve problems.</i></p> <ul style="list-style-type: none"> <li>i. Foster accountability between the OPO and transplant center to boost kidney transplants by implementing continuous quality improvement activities, such as utilization review meetings and Plan-Do-Study-Act (PDSA) cycles to address and prevent organ declines.</li> <li>ii. Create a quality improvement framework, including key metrics (e.g., organ offer acceptance ratio, nonuse rate), for joint accountability between the OPO and transplant program for kidney allocation, acceptance, and utilization.</li> <li>iii. Develop a culture of transparency that recognizes contributions of the entire team—including patients, referring nephrologists, surgeons, coordinators, transplant nephrologists, dialysis facilities, ESRD Networks, and other contributors—to build trust in the transplant system. <ul style="list-style-type: none"> <li>a. Operationalize transparency through enhanced communication with patients regarding their transplant status (active versus inactive) and the organ offers received and declined.</li> <li>b. Cultivate a culture of continuous improvement rather than focusing on blame and reprimands.</li> </ul> </li> <li>iv. Operate with a philosophy of accountability for the outcomes of all individuals on the waiting list and the End Stage Renal Disease (ESRD) patients in the community.</li> </ul>
<b>3. Improve the Patient Experience</b>	<p><i>The transplant center, dialysis center, and OPO collaborate to improve the patient and family transplant experience.</i></p> <ul style="list-style-type: none"> <li>i. Provide education to patients and families so they understand the benefits and trade-offs between dialysis and transplantation.</li> <li>ii. Create scripts to ensure all transplant professionals provide consistent information to patients.</li> <li>iii. Regularly communicate information about “medically complex” kidneys in various formats (e.g., printed materials, videos, and incorporating teachback while meeting with patients). <ul style="list-style-type: none"> <li>a. Ensure patients have physical and mental readiness for transplant and understand potential outcomes like delayed graft function (DGF).</li> <li>b. Set expectations of DGF with transplant candidates before surgery.</li> </ul> </li> </ul>

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	<ul style="list-style-type: none"> <li>iv. Develop programs tailored to address patient special needs, including culture, diet, access to post-transplant care/mental healthcare, limitations regarding travel to pre- and post-transplant evaluations, testing, and appointments, and other social determinants of health that potentially impact transplantation.</li> <li>v. Measure patient satisfaction with the kidney transplant program to determine opportunities for improvement.</li> <li>vi. Provide testing information and expectations for the evaluation that takes into consideration patient accessibility (i.e., make the evaluation site convenient to the population served). Also, be mindful of the use of time (provide options for half-day or full day sessions for diagnostic testing and education).</li> <li>vii. Identify and use local or community-based resources for lodging accommodation (e.g., transplant or hospitality house, and discounted hotel rooms) for out-of-town post-transplant patients to recover and have access to a post-transplant clinic.</li> <li>viii. Participate in dialysis facility “Lobby Days,” which offer peer-to-peer communications and education sessions. <ul style="list-style-type: none"> <li>a. Build relationships and provide transplant education to local nephrologists, dialysis center staff, and their patients and families.</li> <li>b. Encourage completion of health maintenance screening (e.g., colonoscopy, mammogram) prior to referral.</li> </ul> </li> <li>ix. Develop patient and family relationships that embody a philosophy of shared decision-making that includes (but is not limited to): <ul style="list-style-type: none"> <li>a. Discussing implications of accepting a “medically complex” kidney (<math>\geq 60</math> KDPI kidney).</li> <li>b. Ensuring evaluation testing is current, including dental health.</li> <li>c. Communicating patient waitlist status with the patient’s dialysis facility staff.</li> </ul> </li> </ul>
<b>4. Manage the Waitlist</b>	<p><i>The transplant center manages the waitlist to minimize declines related to active candidate readiness.</i></p> <ul style="list-style-type: none"> <li>i. Confirm “active” waitlist candidates are always transplant-ready by establishing a bi-directional communication process with patients to maintain assignment of appropriate status (i.e., monitor change in health status, insurance, support, location).</li> <li>ii. Track and monitor time from referral to waitlist activation.</li> <li>iii. Maintain a large pool of active candidates and know them well so that kidney offers can be accepted on their behalf.</li> <li>iv. Use the electronic medical record (EMR) to document and prevent duplicative testing.</li> </ul>

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	<ul style="list-style-type: none"> <li>a. Assign a transplant coordinator paired with a physician to remove barriers to testing.</li> <li>v. Ensure dedicated points of contact between the OPO and the transplant center for timely communication for medically complex kidney offers.</li> <li>vi. Revisit the transplant candidates' willingness to accept "medically complex" kidneys throughout their waitlist journey.</li> <li>vii. Develop and maintain a process for the transplant surgeon, transplant nephrologist, local nephrologist, and other appropriate members of the patients' care team to collaboratively monitor the progress and/or status of candidates.</li> <li>viii. Know waitlisted candidates over age 60 and manage consistent active status to increase the pool of candidates for "medically complex" kidneys.</li> <li>ix. Expand the selection criteria (e.g., increase body mass index [BMI] to 40, increase age to 75) to increase the number of active waitlist candidates.</li> <li>x. Actively monitor transplant candidates' declining health status, including frailty, and provide consistent education to patients, families, and staff, including: <ul style="list-style-type: none"> <li>a. Potential loss of transplant eligibility due to declining health.</li> <li>b. Benefits and drawbacks associated with accepting a select kidney.</li> </ul> </li> <li>xi. Use the United Network for Organ Sharing (UNOS) Kidney Waiting List Management Tool to manage waitlisted patients from inactive to an active transplant-ready status.</li> </ul>
<b>5. Manage the Acceptance Process and Understand Risk</b>	<p><i>The transplant center articulates organ offer acceptance criteria, understands the associated risks, and communicates the criteria to the OPO.</i></p> <ul style="list-style-type: none"> <li>i. Standardize the decision-making process for accepting kidney offers to create predictable offer acceptance and include an offer escalation process for offers that trigger a decline. <ul style="list-style-type: none"> <li>a. Establish and communicate expectations for offer acceptance to the OPO (e.g., cold ischemic time, creatine levels, age).</li> <li>b. Inform the local OPO and other OPOs outside the donor service area (DSA) of the transplant program's willingness to accept medically complex kidneys.</li> <li>c. Review organ acceptance patterns to identify missed opportunities. Seize opportunities to increase risk tolerance for acceptance and placement of medically complex kidneys.</li> <li>d. Set the Organ Procurement &amp; Transplantation Network (OPTN) kidney offer filters to reflect transplant program offer acceptance practices. Filters are reviewed at least semi-annually to ensure they meet patient criteria and are relevant to current acceptance practices.</li> </ul> </li> </ul>

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	<ul style="list-style-type: none"> <li>e. Establish defined cold ischemic time protocols for evaluating open offers and know the OPO processes related to making open offers.</li> <li>f. Consider placement of select <math>\geq 60</math> KDPI kidneys in adults under the age of 65 when appropriate.</li> <li>ii. The transplant center follows up with the OPO to formally review declined kidneys that were transplanted elsewhere.</li> <li>iii. Create a partnership among OPOs, transplant surgeons, and transplant nephrologists to review offers and accept more organs. Understand one another's procedures to ensure quality and efficiency.               <ul style="list-style-type: none"> <li>a. The transplant center establishes a process where two people are required to decline an organ and one person is required to accept an organ offer.</li> </ul> </li> <li>iv. Ensure the transplant program has the facilities and skilled/educated staff necessary to support increased acceptance and transplantation of select deceased donor kidneys and increase the transplant program's growth.</li> <li>v. Develop and assess scenarios using transplants with medically complex kidneys to extend patient life expectancy.               <ul style="list-style-type: none"> <li>a. Provide and evaluate the full spectrum of transplant possibilities, including high KDPI kidneys, two high-KDPI kidneys (dual kidneys), Public Health Service (PHS) Increased Risk, Hepatitis C virus positive (HCV+), etc.</li> <li>b. Use tools like DonorNet for predictive analytics on patient offers, estimating the next offer timing and survival rates over time.</li> </ul> </li> <li>vi. Maximize the amount of risk the organization can support DGF by evaluating the waitlist for patients with the greatest risk of DGF and educating them on post-transplant expectations. This is done to ensure the greatest success for the patient, medical team, and kidney program.</li> <li>vii. Establish protocols in support of A2/A2B blood type donors into blood type B recipients to expand the pool of potential candidates.</li> <li>viii. Build confidence in the biopsy process by ensuring the availability and quality of slides and communication with the OPO.               <ul style="list-style-type: none"> <li>a. Request that the OPO provide a clear biopsy and picture of each kidney offer in DonorNet.</li> </ul> </li> </ul>
<b>6. Manage the Post-</b>	<p><i>The transplant center manages the post-transplant process to ensure optimal outcomes.</i></p> <ul style="list-style-type: none"> <li>i. Monitor and review the impact of DGF on initial hospital stay, dialysis use, and rehospitalization costs.</li> <li>ii. Create an "all-teach, all-learn" environment that promotes improvement in lieu of penalty. Include all staff who are part of decision-making to accept a kidney offer.</li> </ul>

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<b>Transplant Process</b>	<ul style="list-style-type: none"> <li>iii. Establish “high-risk” meetings to review and respond to emerging problems (e.g., infections, vital signs) and actively monitor progress of high-risk kidney recipients.</li> <li>iv. Provide post-transplant follow-up care that establishes protocols for emerging problems in higher-risk cases to be addressed quickly (e.g., 24/7 access to the transplant nephrologist).</li> <li>v. Ensure ongoing, peer-to-peer collaboration between the transplant nephrologist and patients’ local nephrologist to align patient care plan goals and ensure an effective post-transplant handoff plan. Access to easy and quick referrals is advised when acute problems arise after patients have transitioned back to their community nephrologist.</li> <li>vi. Build a post-transplant care process designed to discover and address patient concerns and other issues before they become problems.</li> <li>vii. Provide follow-up care with high-risk patients for at least one year post transplant.</li> <li>viii. Develop and provide specialized care pathways for patients with special needs (e.g., DGF, multi-organ transplants) that promote near real-time access to the care team.</li> <li>ix. Encourage the post-transplant team to ask questions of the transplant nephrologist, referring nephrologist, and transplant recipient to improve education between the patient and care team and improve team effectiveness.</li> </ul>
<b>7. Use Data to Drive Improvements in Care</b>	<p><i>The transplant center and OPO use data to improve efficiency, effectiveness, and quality of care.</i></p> <ul style="list-style-type: none"> <li>i. The transplant center and OPO meet at least quarterly using a data-driven approach to review offer acceptance practices, including kidneys declined and transplanted elsewhere, to improve performance.</li> <li>ii. Use data on high-performing programs to establish aims for kidney transplants.</li> <li>iii. Establish bold goals and use metrics to monitor goals and improve OPO and transplant performance.</li> <li>iv. Look beyond KDPI and consider all clinical data when accepting a kidney.</li> <li>v. Document all evaluation testing in the EMR to reduce duplicative testing at dialysis facilities and improve efficiency.</li> <li>vi. Monitor and analyze the impact of DGF on hospital length of stay, dialysis needs, rehospitalization costs, and transplant outcomes.</li> <li>vii. Use data to perform timely after action reviews. <ul style="list-style-type: none"> <li>a. Update necessary revisions to policy and procedures within the kidney transplant program as appropriate.</li> </ul> </li> </ul>



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	<ul style="list-style-type: none"> <li>b. Invite OPOs to present data-driven information, trends, and follow-up with decision makers regarding their declined offers.</li> </ul>
<b>8. Embrace Innovation</b>	<p><i>The transplant center and OPO systematically evaluate new concepts, methods, and technologies that are aligned with organizational missions and strategic objectives.</i></p> <ul style="list-style-type: none"> <li>i. Provide continuing education to OPO and transplant program staff, so the next generation of organ donation and transplant professionals are current with innovative technologies and clinical procedures.</li> <li>ii. Use cross-organizational training to foster knowledge sharing and relationship development within the organization.</li> <li>iii. Involve and engage cross-setting healthcare professionals and clinicians in national transplant discussions to further the transfer of lived experience and knowledge.</li> <li>iv. Educate and encourage dialysis professionals and clinicians to position dialysis as a bridge to transplantation.</li> <li>v. Explore and develop innovative technologies that improve workflows, communication, and process efficiency and effectiveness, including: <ul style="list-style-type: none"> <li>a. Software systems (e.g., electronic health record [EHR]/EMR programs, on-call shared spreadsheets)</li> <li>b. Medical and surgical equipment (e.g., mechanical perfusion, xenotransplantation, normothermic regional perfusion [NRP])</li> </ul> </li> <li>vi. Evaluate efficacy of new medications to better support and minimize DGF, inflammation, and other challenges associated with kidney transplantation.</li> <li>vii. Educate community nephrologists to consider referring early for preemptive transplantation, if appropriate.</li> </ul>

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