Kidney Health Analytics and
Responsive Emergency Support

CMS KHARES Community Of Practice Call

Bringing together the kidney community to share knowledge, innovation, and best practices.

June 25, 2026

Hosted by Kidney Health Analytics and Responsive Emergency Support (KHARES)

Who is KHARES?

Kidney Health Analytics and Responsive Emergency Support

Kidney Health Analytics and Responsive Emergency Support (KHARES)

IPRO is the KHARES national CMS-funded contract dedicated to supporting the kidney community through:

- 🤝 Community Engagement & Partnerships
- 🛡️ Emergency Preparedness & Response
- 📊 Data Analytics & Reporting
- 👨‍👩‍👧‍👦 Patient & Family Engagement
- 📚 Technical Assistance & Information Sharing

Our Goal:

Strengthen the kidney community through collaboration, data-driven solutions, education, technical assistance, community partnerships, and emergency preparedness—helping ensure high-quality care, informed decision-making, and resilience before, during, and after emergencies.

Meet the KHARES Team

Kidney Health Analytics and Responsive Emergency Support

KEY STAFF



Sue Caponi
Project Director



Tom Bradsell
Emergency Lead



Beth Stevens
Data Lead



Agata Roszkowski
EPP/PFR Lead

Leadership



Vicky Cash
Community Engagement



Kim Irby
Project Director



Svetlana Lyulkin
ESRD Systems SME



Laura Mankin
Community Engagement

Team



Lindsay Kaatz
Project Manager/ Environmental Scan



Jenny Rockell
Analyst/Interoperability



Lijing Zhang
Analyst/Dashboards



Stephanie Hull
Community Engagement & Partnership



Matthew Lafergola
PMP



Theresa Jacobellis
Communications



Laura Edwards
Contract Manager

Why a Community of Practice Call?

Kidney Health Analytics and Responsive Emergency Support

Connect

Bring together ESRD Networks, providers, emergency management partners, and stakeholders.



Learn

Share emerging practices, innovations, lessons learned, and educational resources.



Collaborate

Foster partnerships and peer-to-peer problem solving across the kidney community.



Share Information

Promote timely communication and dissemination of tools, resources, and best practices.



Strengthen Preparedness

Support emergency readiness, resilience, and continuity of care.



Support Better Outcomes

Advance patient-centered care and improve outcomes for people living with kidney disease.



Meeting Guidelines

Kidney Health Analytics and Responsive Emergency Support

- Please keep your microphone **muted** when not speaking.
- Use the **Chat** feature to submit questions throughout the presentation.
- Questions will be addressed during the **Q&A** portion as time permits.
- This session is being **recorded**.
- Presentation **materials** may be shared following the webinar.
- If you experience **technical issues**, please use the **Chat** feature for assistance.



Today's Presentation

Kidney Health Analytics and Responsive Emergency Support

Optimizing Use of High KDPI Kidneys for Transplant

Presented by:

Medical University of South Carolina

- Prince Mohan Anand , MD
- Ahmad Alqassieh, MD
- Adrian Carlson, PharmD


Medical University of South Carolina Transplant Center Mid-Carolinas
MUSC Health
Medical University of South Carolina
Changing What's Possible | MUSChealth.org

Disclosures

- Dr. Anand has been a co-investigator on studies and received funding from Novartis, NIH
- Dr. Anand is on the speaker bureau and advisory board for Biogen, Apellis, Novartis, ThermoFischer, Apellis, Sanofi, Verici and Alexion
- None of their products will be discussed today
- Ahmad Alqassieh and Adrian Carlson have nothing to disclose

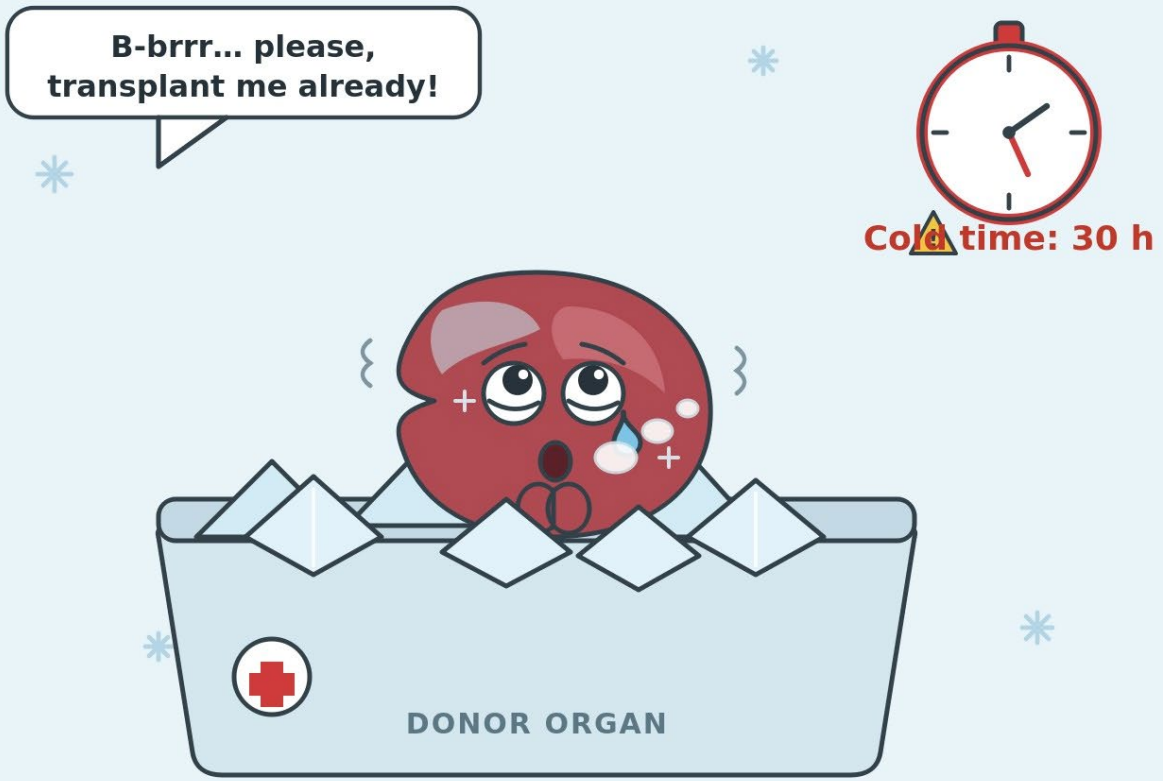
How to Improve Organ Acceptance

Prince Mohan Anand, MD, FACP, FASN, FAST
Director of Transplant Services and Medical Director

Ahmad Alqassieh, MD
Surgical Director of Transplant Services

Adrian Carlson, PharmD
Solid Organ Transplant Pharmacist

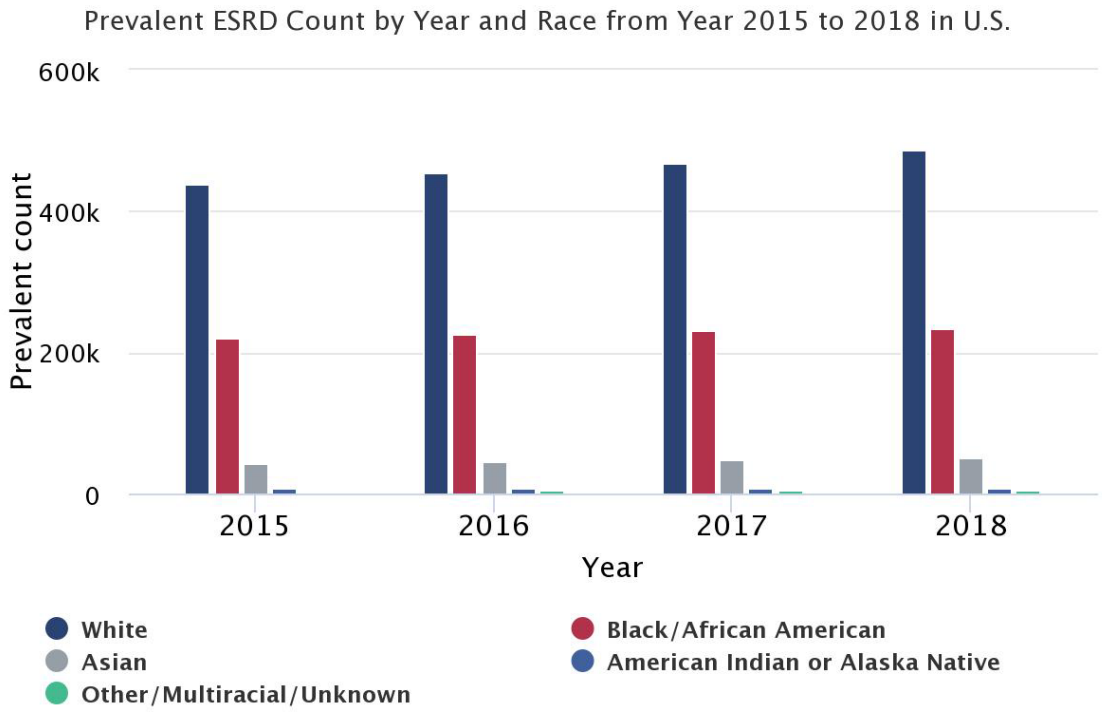
MUSC Mid-Carolinas,
Lancaster, SC

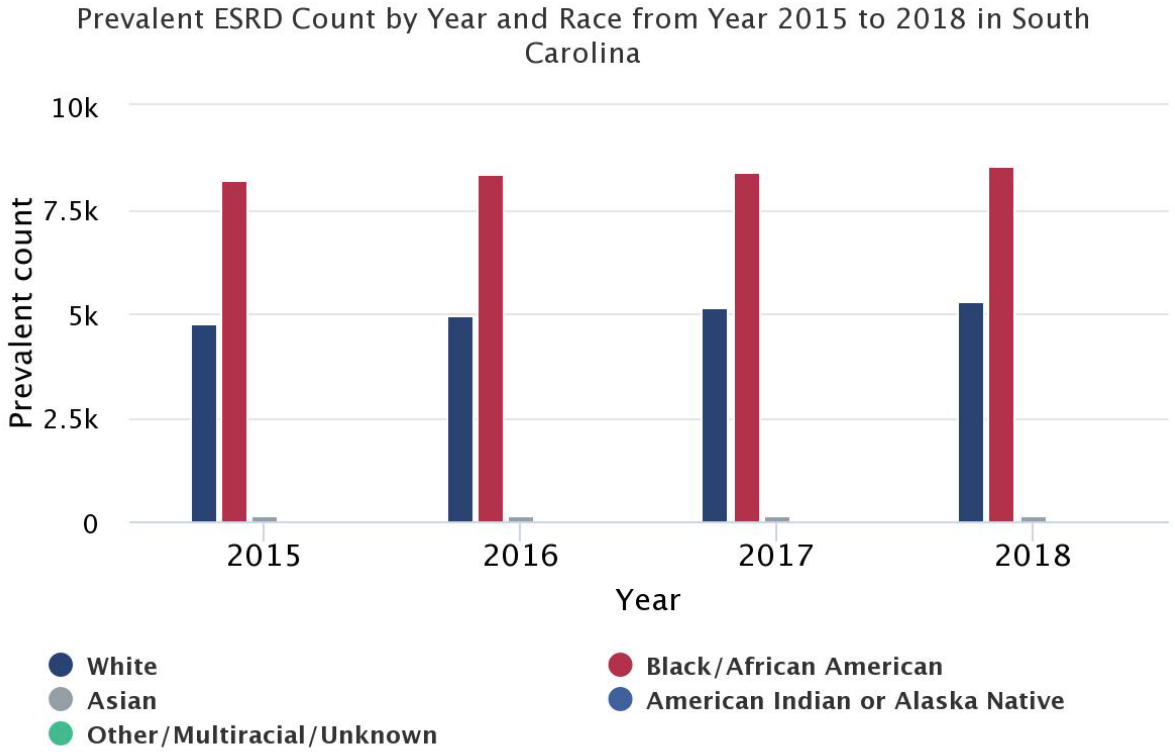


The longer a donor kidney's cold ischemia time, the more it begs to be used.

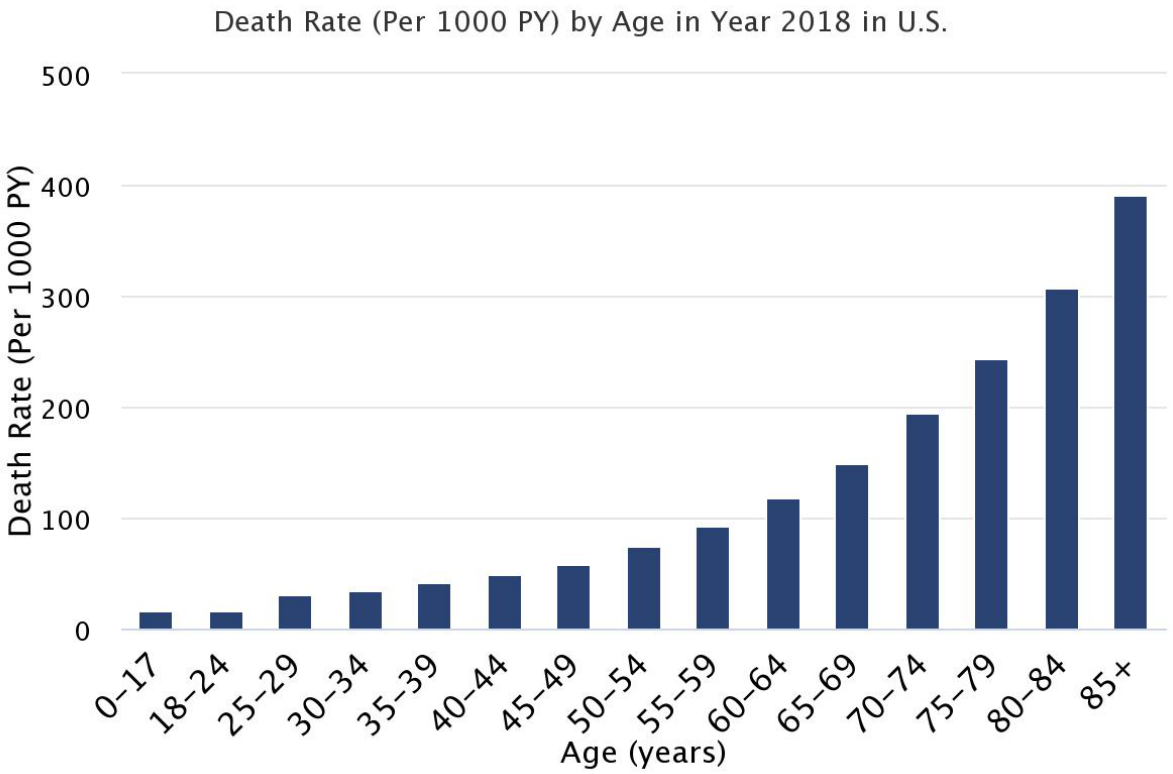
CKD Facts

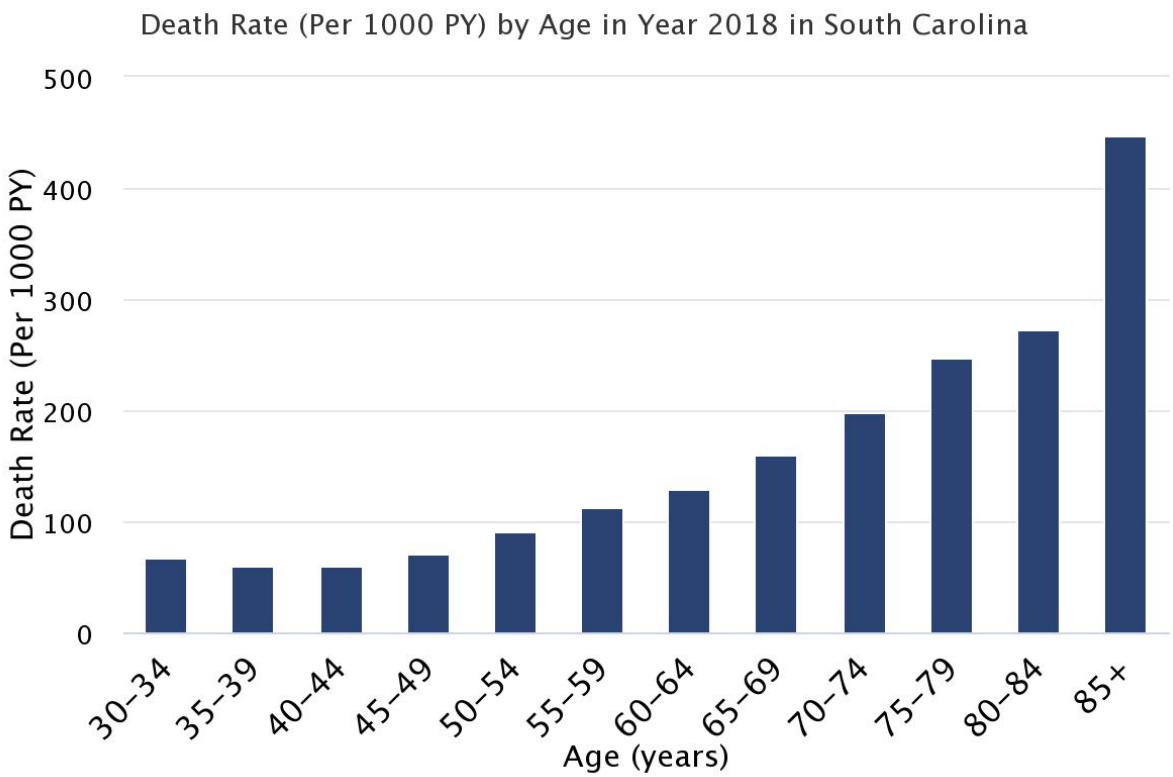
There are estimated 37 million in the US with CKD
90% do not know that they have diminished kidney function
1 in 3 adults in US are at risk of CKD
The annual incidence of CKD is increasing globally
Minorities are at higher risk than Caucasians, with AA 4 time more likely to have CKD and Hispanics 1.3 times.
555,000 patients are on some form of dialysis
230,000 have a working kidney transplant
100,000 patients are waiting for kidney transplants in the Unites States and 1,347 patients waitlisted in SC


Prevalent ESRD Count by Year and Race from Year 2015 to 2018 in U.S.
600k
400k
200k
0
Prevalent count
2015
2016
2017
2018
Year
White
Asian
Other/Multiracial/Unknown
Black/African American
American Indian or Alaska Native


Prevalent ESRD Count by Year and Race from Year 2015 to 2018 in South Carolina
10k
7.5k
5k
2.5k
0
Prevalent count
2015
2016
2017
2018
Year
White
Asian
Other/Multiracial/Unknown
Black/African American
American Indian or Alaska Native

ESRD Death rates in US and SC – comparison





Death rate for ESRD is higher in SC at every age group compared to the US

Kidney transplantation is a treatment, not a cure

- A deceased or living donor kidney is required
- The transplant workup takes time; eligibility is strict
- Requires major surgery
- Need to take medications daily, including anti-rejection medication

Types of transplant

- Living donor
  - Quicker
  - No to minimum wait times
  - Recipient and the allograft last longer
  - ***Not everyone has a living donor, especially among African American population***

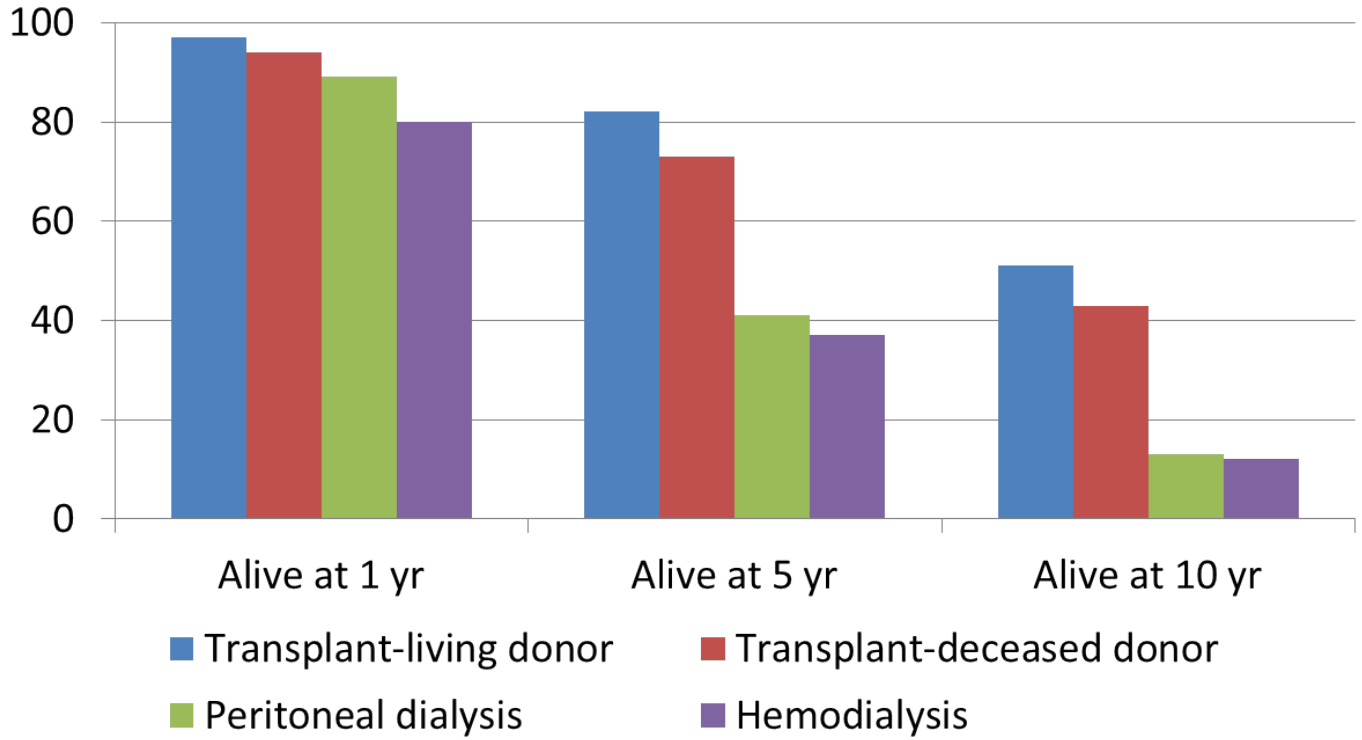
- Deceased donor
  - Longer wait times
  - Outcomes based on the quality of the donor kidney
  - ***Donation after brain dead vs Donation after cardiac death***

- Preemptive transplant
  - Transplant done before starting dialysis
  - Better outcomes
  - ***Patients can be referred at GFR<20***

- Transplant after starting Dialysis

A kidney transplant from a living donor may be better than other treatments

Number (out of 100) alive at the end of time period by treatment



Preparing for Kidney Treatment You Have a Choice: http://ckddecisions.org/wp-content/themes/jhm/flipbook/Prepared2/HTML/index.html

Kidney Allocation

- All Allocation policies should follow OPTN final rule (Equitable allocation of cadaveric organs)
- The allocation policy for kidney transplant was changed in March 2021.
- Under new allocation policy, donor service area (DSA) were removed
- The kidneys are allocated with in 250 nm (280 miles) radius from donor hospital
- The purpose of this allocation system is to increase organ use and decrease discard.



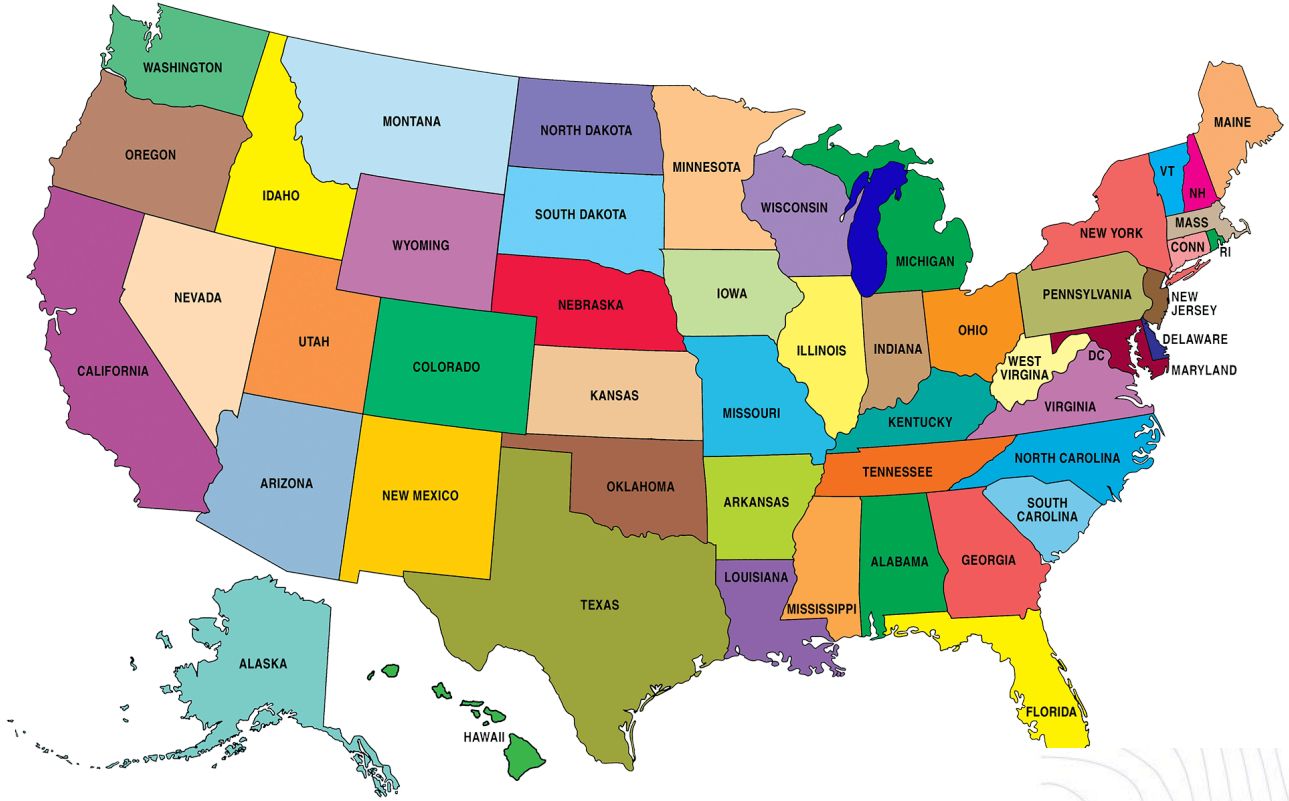
MUSC Lancaster

80 bed rural/sub urban transplant program

Started transplant services in July 2022

Transplanted over 400 kidneys

Acceptance ratio 2.55





DOUBLE
THE HOPE

Now featuring **two** South Carolina transplant hubs, MUSC Health is increasing procedures, meaning less time waiting for an organ match.

LEARN MORE

MUSC Health
Medical University of South Carolina

MUSC Health
Medical University of South Carolina

Changing What's Possible | MUSChealth.org

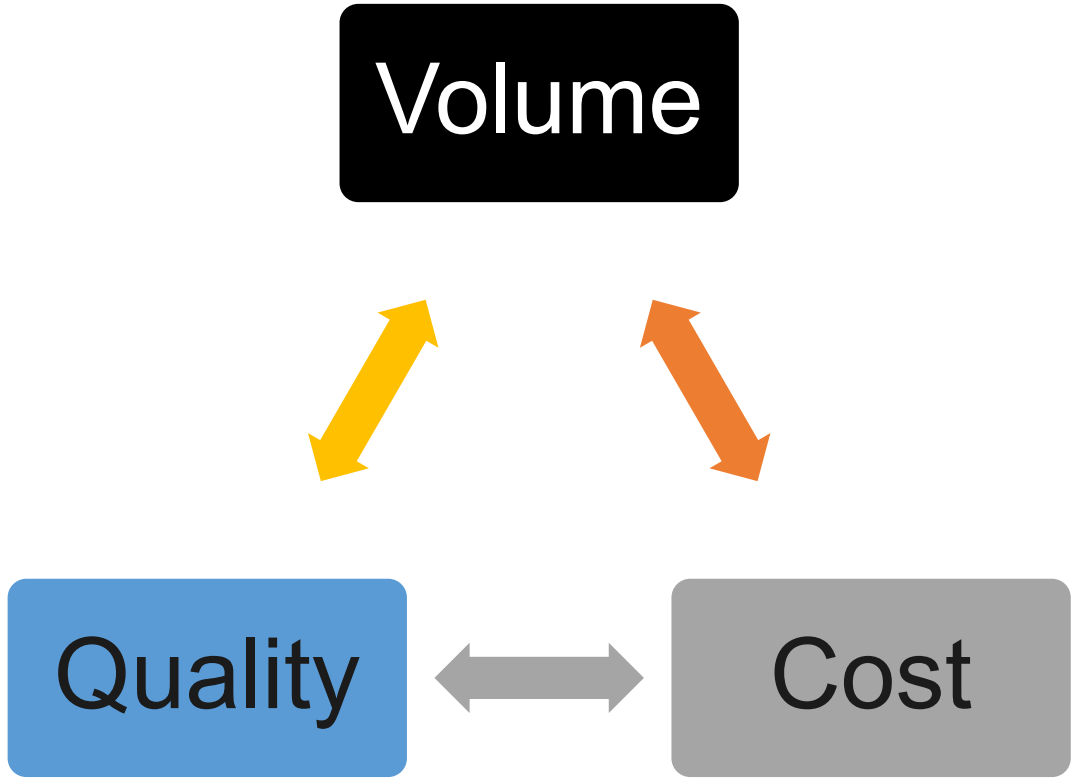
Most Transplant Divisions have the same 2 main missions, supplemented by other goals

1) Do Transplants

Outcomes

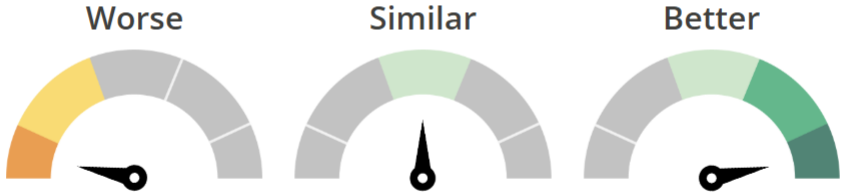
2) Do Them Well

Research



Transplant Center Search Results

Compare each center's performance to national rates for similar patients:



Select All (4 max) | Show National Rates | Select centers and click the compare button to view a detailed comparison. | COMPARE

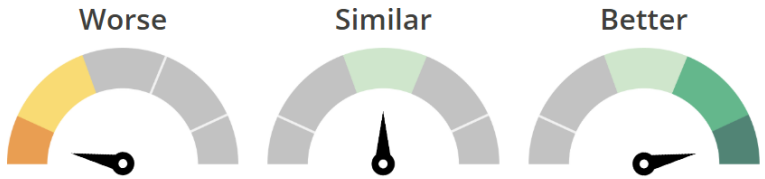
Showing 14 results for **kidney** transplant centers, **adult** patients, within **250** miles of **29720**

Click the headers below to sort the results.

Location & Distance	Deceased Donor Transplants In A Year	Living Donor Transplants In A Year	Get A Deceased Donor Transplant Faster ↓	1-Year Kidney Survival
MUSC Lancaster Lancaster, SC – 1.7 miles away FULL REPORT	**121** Adults	**0** Adults		

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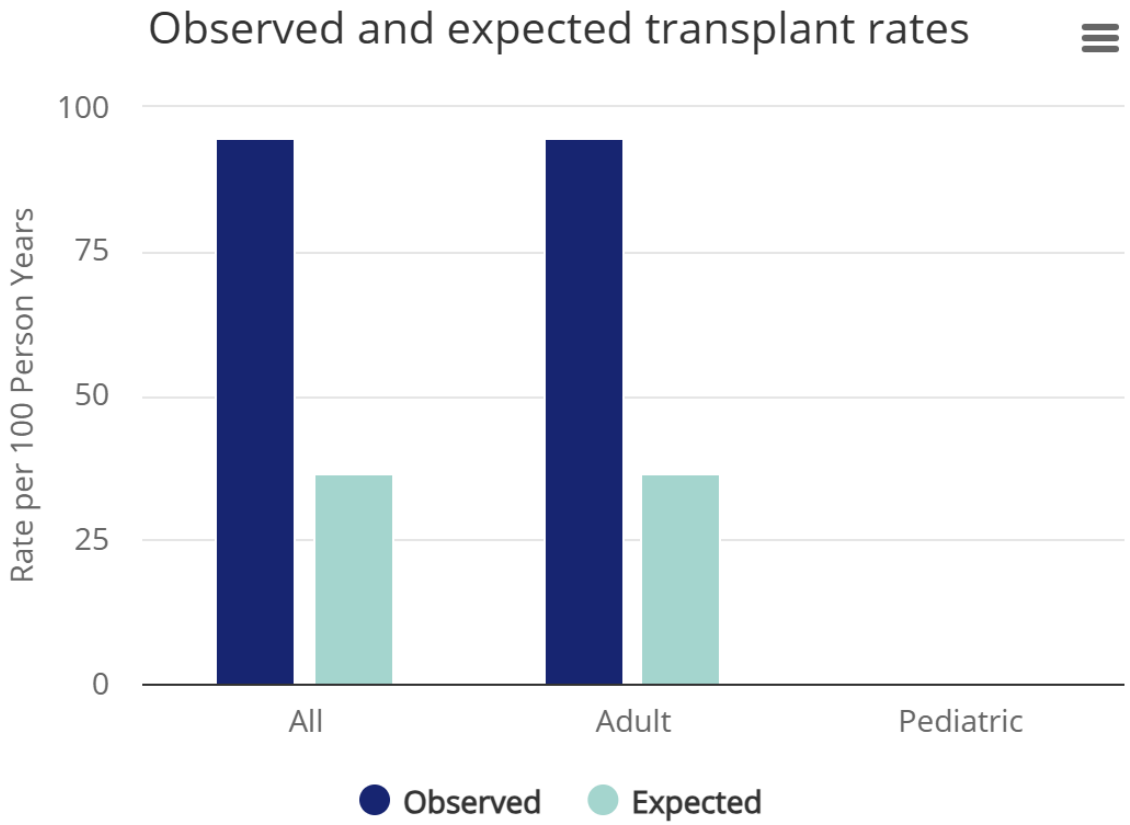
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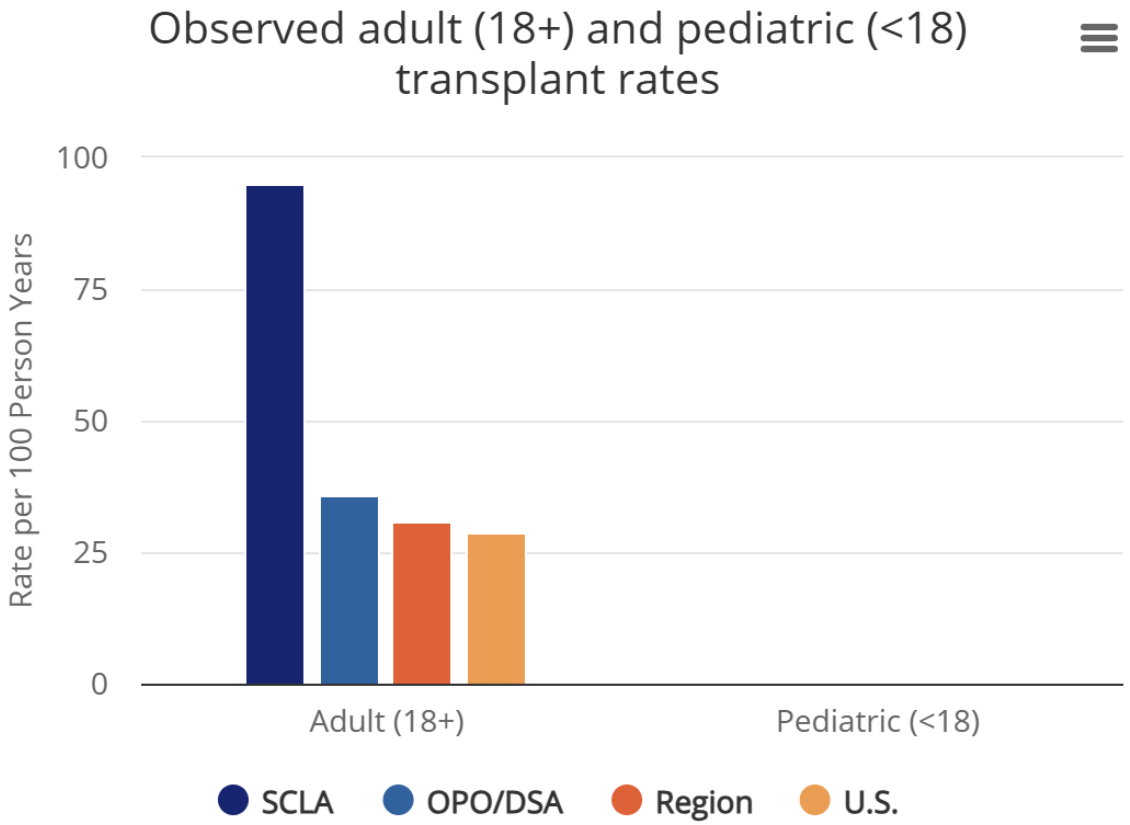
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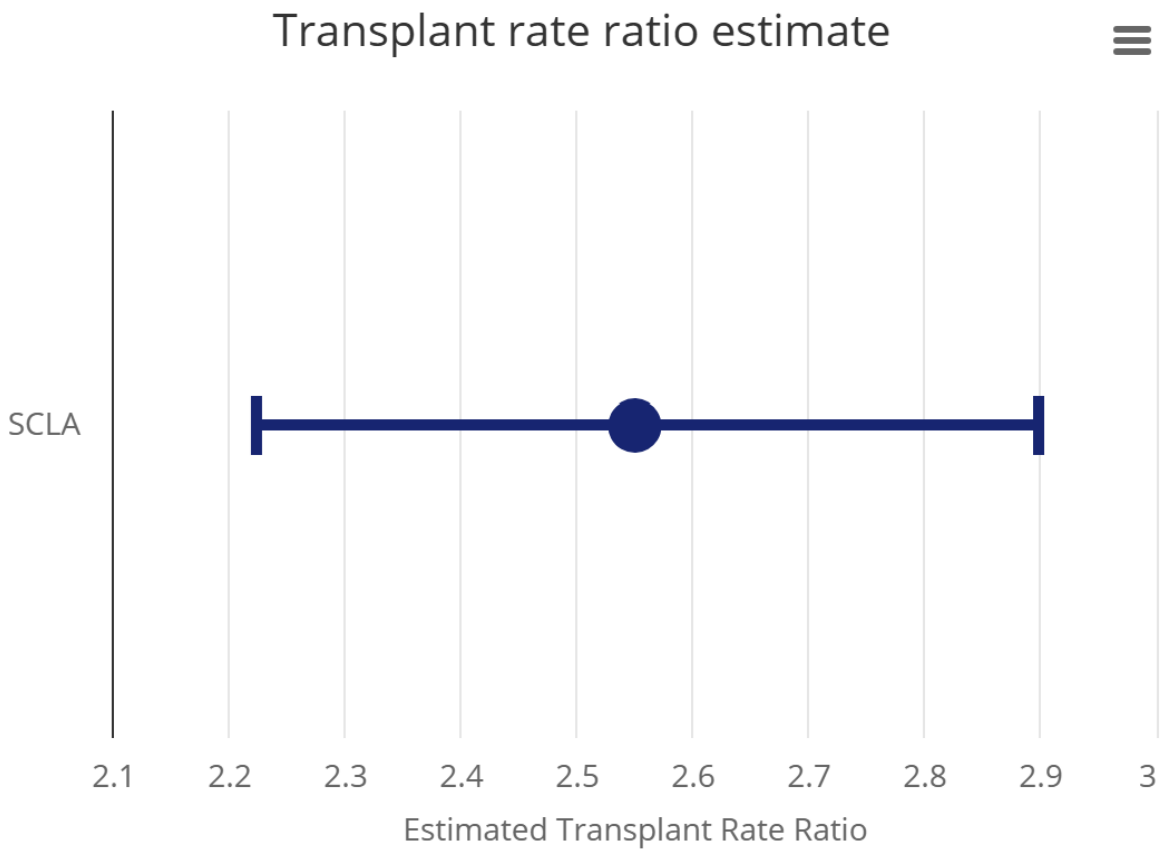
Transplant Rates

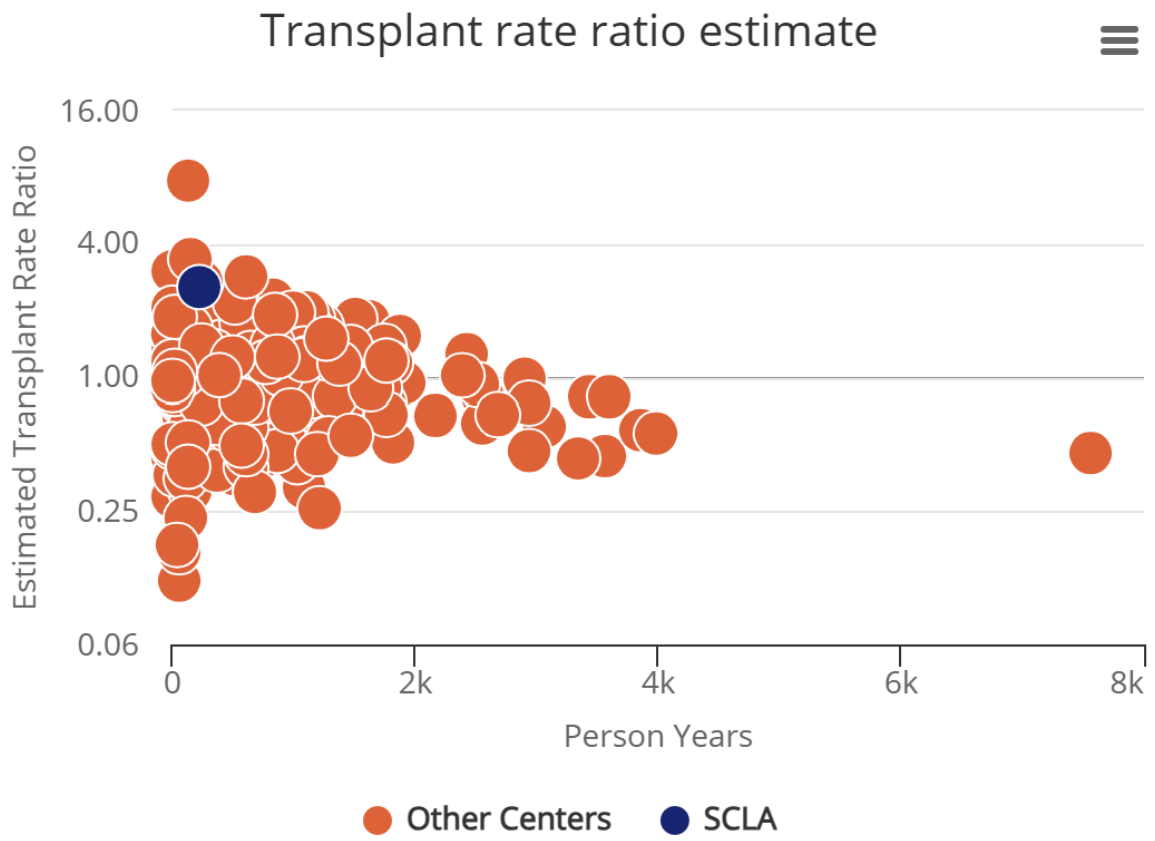
07/01/2023 - 06/30/2025



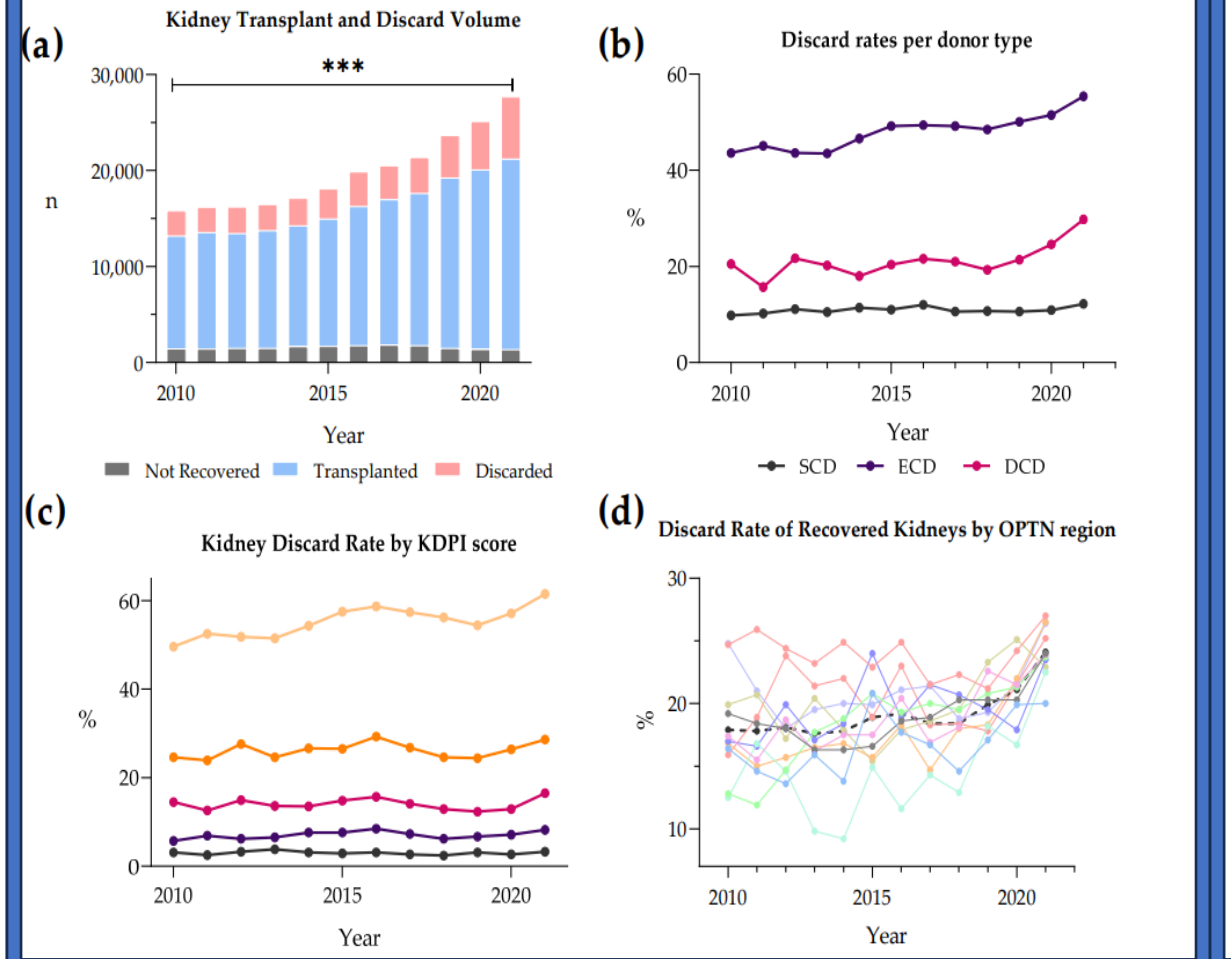


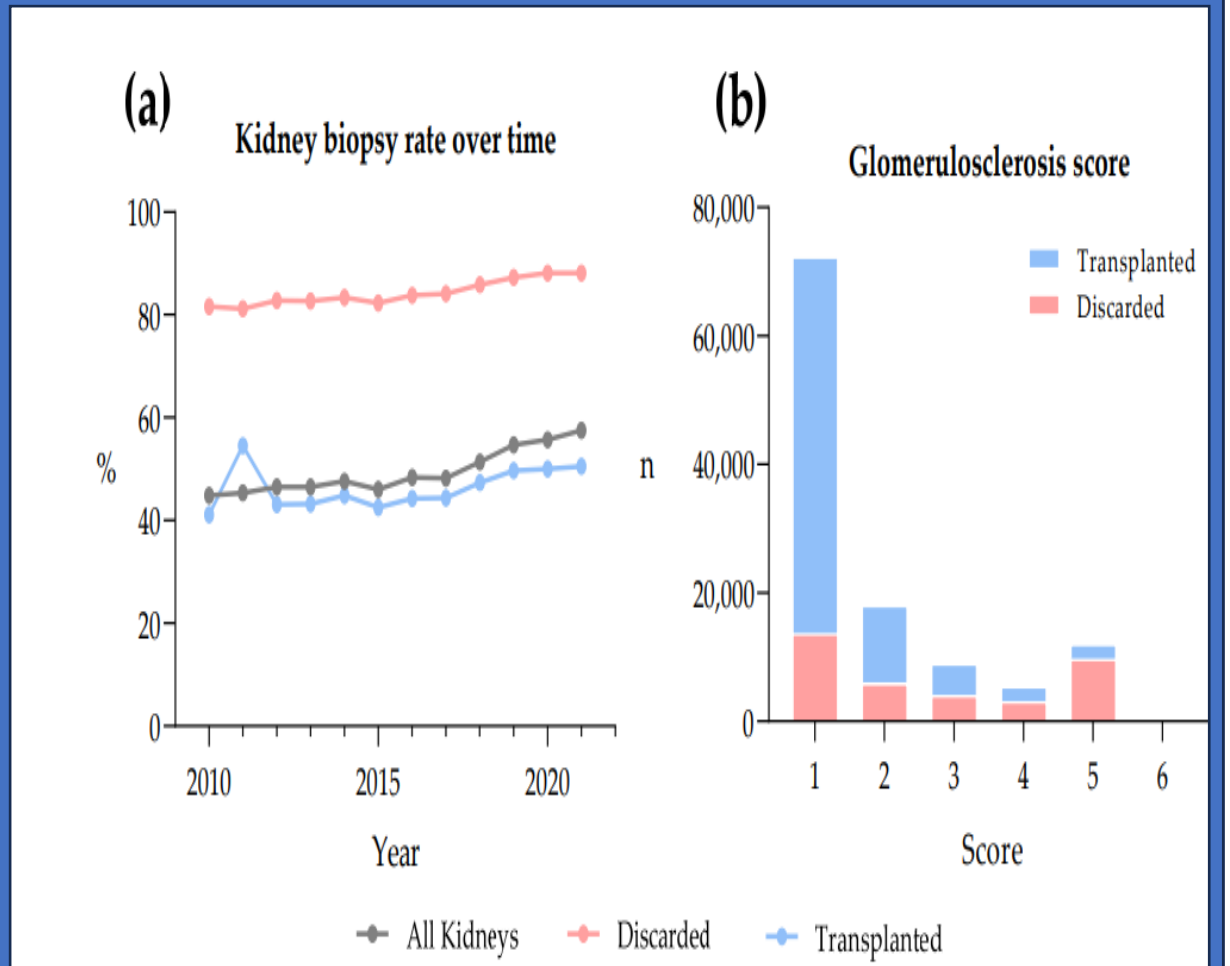
Transplant Rates 7/1/2023 – 6/30/2025





Our Question: How & In Whom To Use It Or Else Its Heading To Trash Bin!!





Ceilidh McKenney et al: Wasted Potential: Decoding the Trifecta of Donor Kidney Shortage, Underutilization, and Rising Discard Rates: Transplantology 2024

- CARE Tool provides

- Basic donor info: age, KDPI, DCD-DBD, Cr, % glomerulosclerosis
- Acceptance sequence, if any, & our center's refusal reasons
- Outcomes: Recipient Cr at discharge, 6m, and 12m

- CARE Tool lacks data on

- Detailed PMH (DM, HTN, historic Cr, malignancy)
- Inpatient course (Cr trajectory, UOP, use of CRRT, infection)
- Post-clamp info (warm time, anatomy, photos, pump, biopsy)

Taking call together



Surgeons and nephrologists are on call together



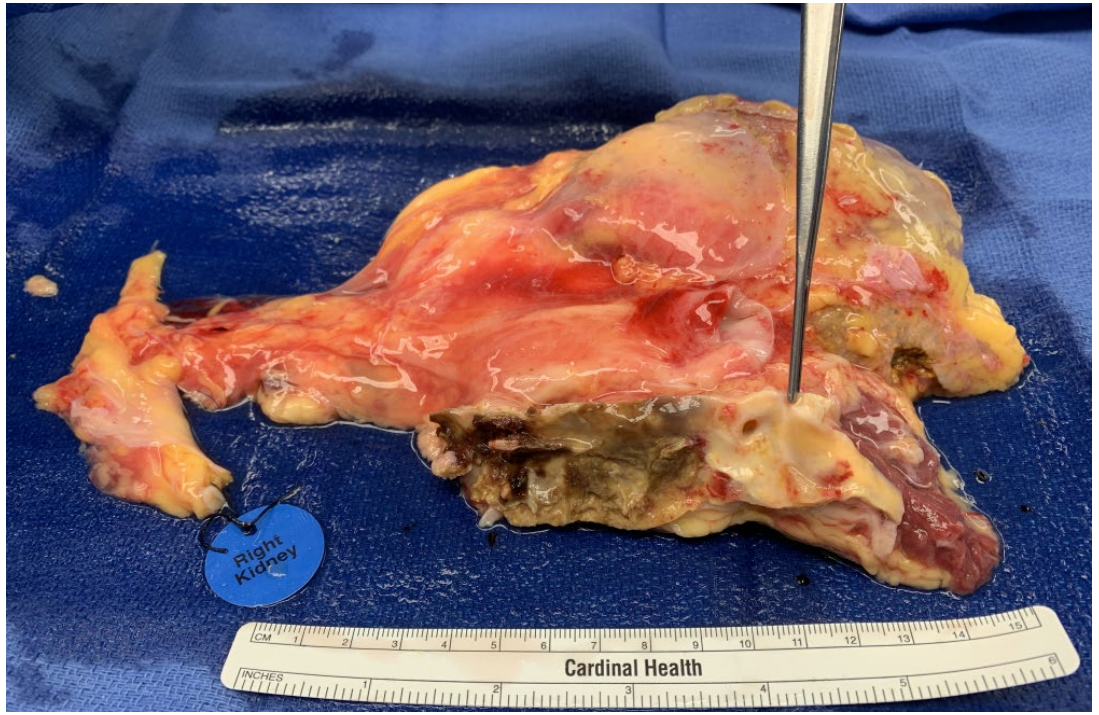
Anatomy specific concerns punted to the surgeons and nephrologists look at the biopsy etc



Ask for waivers

Anatomy concerns – case from last week

- 63 M
- KDPI 76
- IN Cr 1.7, Peak Cr 2.5, Ter Cr 1.2
- Biopsy -> 0% GS, <5% IFTA, no vasc dz.
- Pump numbers @ 8 hours Flow 55, Resistance 0.6



How did it go?

- Anatomy waivers were granted
- The cuff of pump was not on the artery
- Cuff repositioned by Dr. Alqassieh leading to improvement in flow (150) and resistance (0.2)
- Kidney was accepted and transplanted as living donor (cuff had to be cut)
- Pt making good amount of urine
- Creatinine trending down

Not every offer goes as planned

- 51 M
- KDPI 84%
- Crt: 1.65/1.71/1.61
- Left Kidney Pump numbers Flow-53 Pressure- 39/22 Resistance- 0.58
- The kidney was twisted and numbers improved after repositioning



Not every offer goes as planned

- There was a dissection at the upper end of the artery close to the hilum, case was cancelled



We got an offer declined by another center

- 13 y/o donor
- Normal creatinine
- No biopsy
- Kidney declined due to anatomical damage in the OR

- Called the procuring surgeon, who happens to be a friend (at midnight). He did not remember any issues
- Kidney accepted with full waivers.
- Organ transplanted at CIT 32 hours with immediate graft function with no anatomical anomalies seen by our surgeon apart from extra dissection near the hilum, no damage to the vessels or the ureter

Have a pathologist friend

- We review our biopsies ourselves
- Specialist direct gives the opportunity to review the slides and can be shared
- We share the slides with our pathologist and discuss as needed.
- We have accepted organs with good outcomes and have declined the organs based on the review as well.

Recipient selection is the key

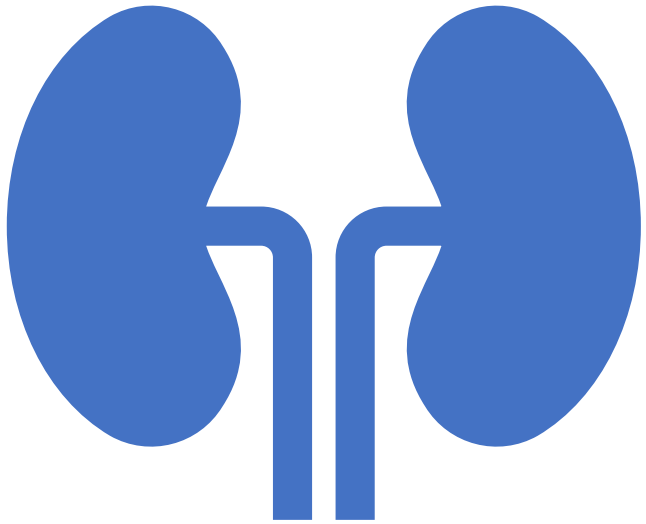
- We need to find the appropriate recipient for the appropriate organ
- When the patients are listed, they should be ready for transplant
- Having specific on-call notes are very helpful for the team on the day of surgery (CNI minimization or transplanting on the right vs left side due to calcifications)

Post Transplant Care

- Early transition to CNI free or CNI minimization
- Early biopsies
- Low volume fluid resuscitation in OR for kidneys that are expected to have DGF or slow graft function
- Lasix and Lokelma are your good friends

Talk to your team-> pharmacist, social workers, post transplant coordinators etc.
We are taking kidneys from 34 Lives now

Why Look Beyond Calcineurin Inhibitors in high KDPI kidney transplantation?



- High KDPI kidneys often have less functional reserve
- More likely to be from older donors, chronic donor injury, prolonged cold ischemia, and delayed graft function
- Calcineurin inhibitors can contribute to renal vasoconstriction, impaired early graft perfusion, and chronic nephrotoxicity
- In selected recipients, lowering CNI burden may help preserve function in a vulnerable allograft

What are the Immunosuppressant Alternatives?

CNI minimization	• mTOR inhibitors • **Sirolimus, everolimus**
CNI avoidance	• Costimulatory blocker • **Belatacept**

Potential Advantages of mTOR Inhibitors

- Reduced CNI exposure
- Less nephrotoxicity
- Lower malignancy risk
- CMV / BK viral benefits

Potential Disadvantages of mTOR Inhibitors

- Side effects
- High discontinuation rates
- Higher risk of early rejection
- Less evidence in steroid free regimens

Potential Advantages of Belatacept

- Improved long-term kidney function when compared to those treated with a CNI-based regimen
- Improved metabolic/cardiovascular, neurotoxic profile
- No trough level monitoring required
- Reduces amount of dose changes; helpful for adherence and patients with education barriers

Potential Disadvantages of Belatacept

- Increased risk of early T cell mediated rejections
- Increased risk of viral infections
- Can be expensive for some patients
- Requires an IV infusion

Which Strategy to Choose?

- Reason for CNI intolerance
- Weigh infection risk
- Infusion logistics
- EBV serostatus
- History of malignancy
- Concerns with low health literacy patients struggling with frequent dose changes
- Cost/insurance

In Summary

- Transplanting high KDPI kidneys can be successful, when choosing the right kidney for the right patient
- Multi-discliplinary collaboration is key
- Requires out of the box thinking for acceptance, surgical technique, and tailoring of immunosuppression



Kidney Health Analytics and Responsive Emergency Support

Thanks

?

Thank you for Attending

Kidney Health Analytics and Responsive Emergency Support

Please take a moment to complete the event assessment.



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