

# TRANSPLANT GROWTH COLLABORATION

September 19, 2025





# Framing

---

Dennis Wagner & Chris Zinner

# Agenda & Goals

## Leadership Work

## Our Mindset for Today's Session





# Goals for Today

1. Provide a clear picture of the relative performance of TXCs across the nation and regionally
2. **Celebrate** and **learn** from growth in local and national transplant hospitals
3. **Explore** the current needs, opportunities and potential benefits of growth
4. **Learn** common barriers to growth and solutions for overcoming them
5. **Commit** to specific, ambitious actions to support further, rapid, successful growth at transplant hospitals and OPOs

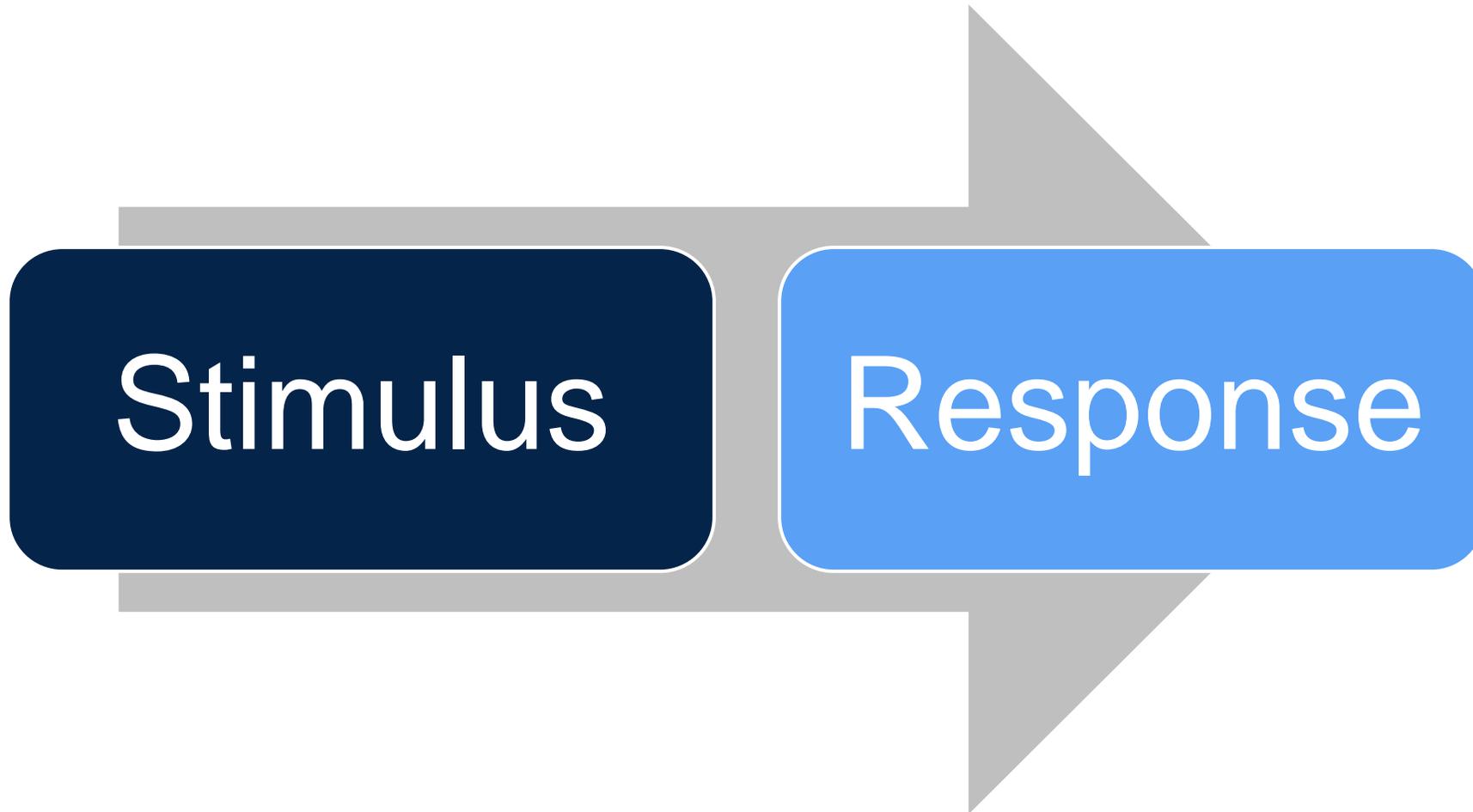


# A Content-Rich Uplifting Agenda

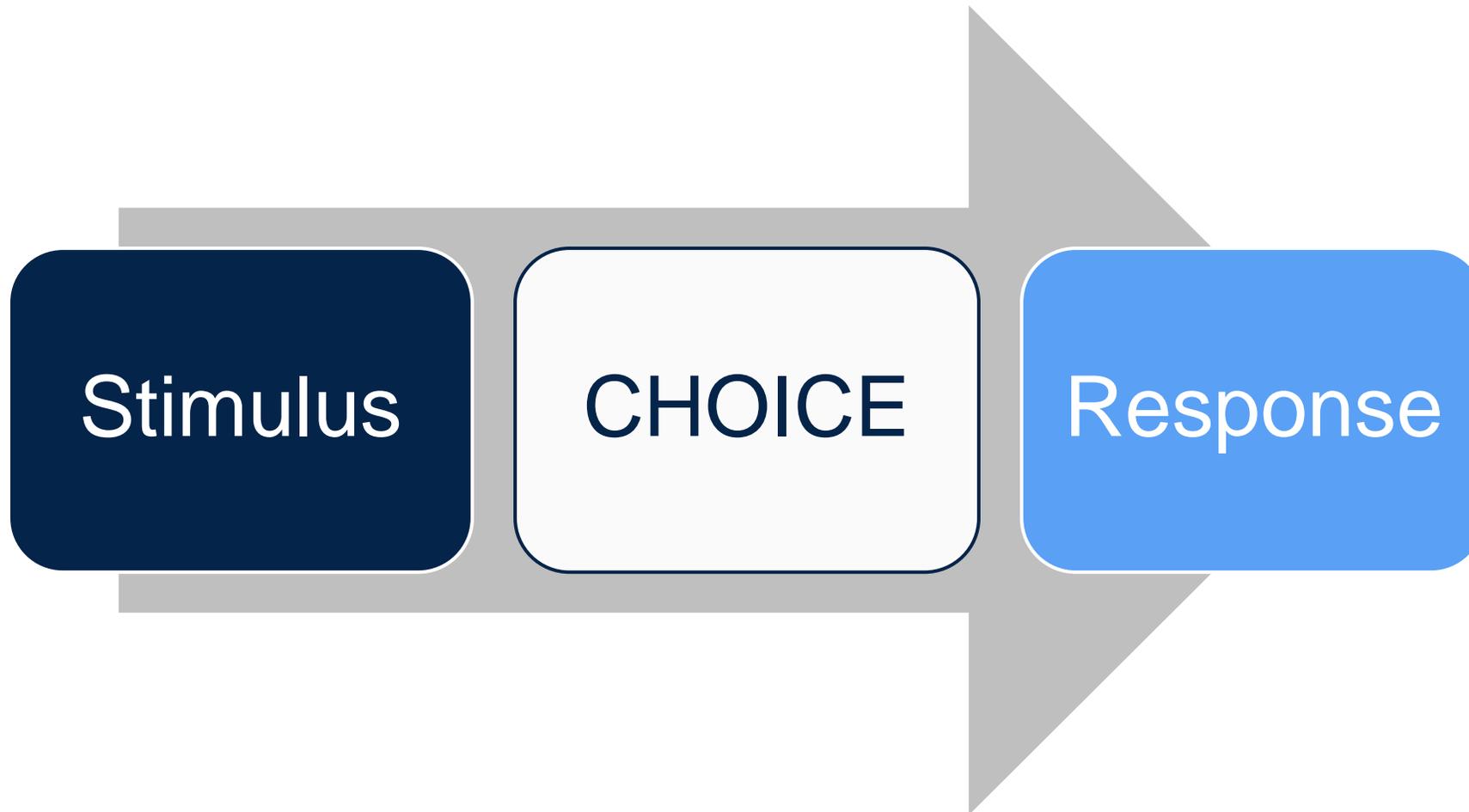
*-- Celebrate, Learn, Explore, Commit --*

1. Connect to Purpose and Celebration of Shared Work
2. Framing & Welcome
3. National Activities, Data, and Results to Increase Transplant
4. Case Studies of Three High-Growth Transplant Programs
5. Executive Leadership Panel
6. Co-Creating Future Possibilities for Sustained Action
7. Leaving in Action

# A Powerful Model

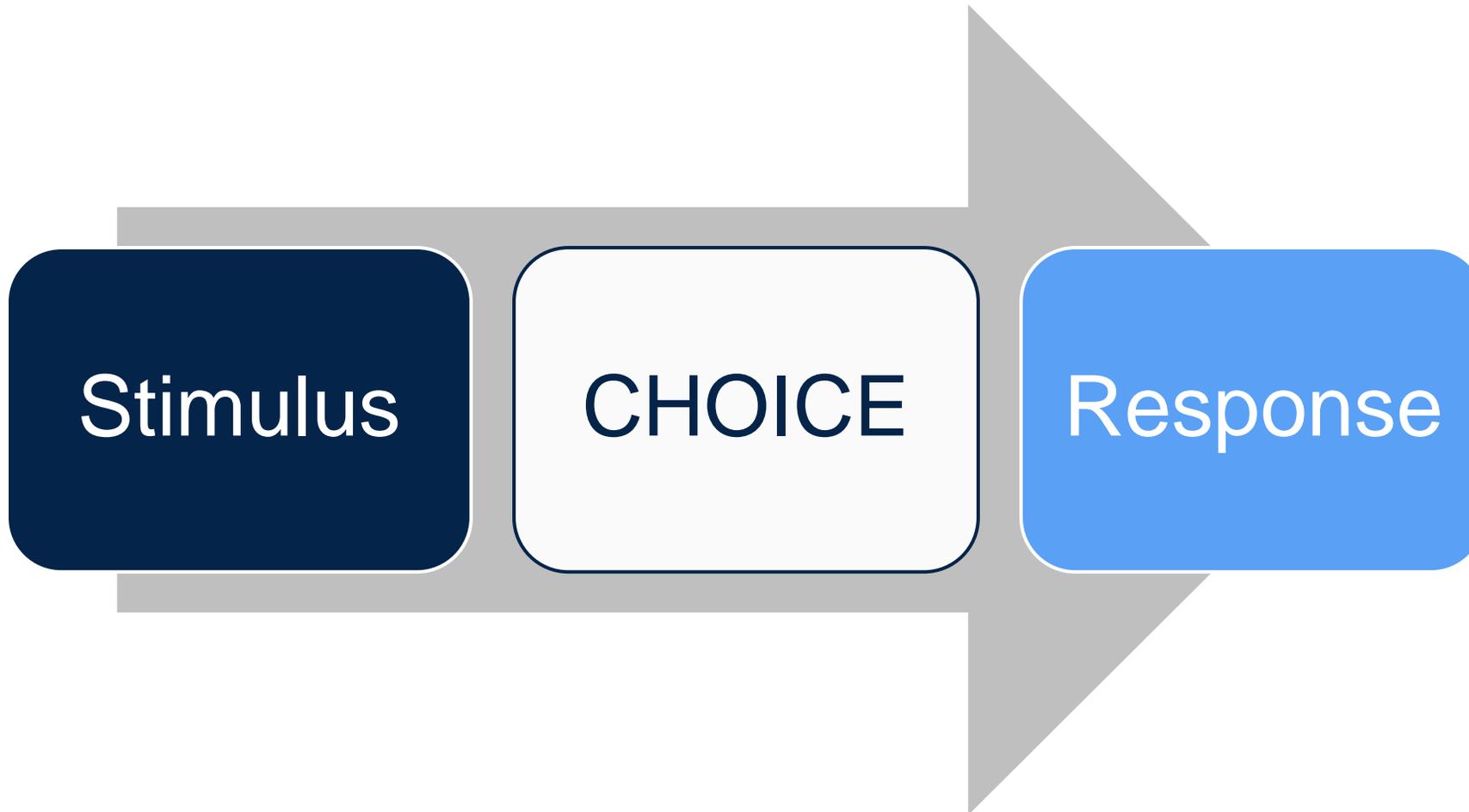


# Choice: The Most Powerful Model



**Getting intentionally deliberate about making our choices is key— this is “exercising the muscles of human-ness.”**

# What we think, what we say, and what we spread to others... are Leadership Choices.



**All of us, regardless of position, have the opportunity to make Leadership Choices in our lives and our work.**



## A KEY CHOICE:

# Leadership is a self-accountability

- Unlike management, you cannot delegate leadership or make someone a leader.
- Leadership is a **CHOICE** a person makes.
- This Choice can be made by people at any level of an organization.
- Leaders align with other leadership voices to move on shared strategic efforts like growing transplant volumes.



**Latrail Gatlin**

# Request to choose to be together today in a certain way



**Engaged**  
and contributing:  
All-Teach, All-Learn

**Appreciating each  
other** as fellow  
travelers in life-saving  
work

**Exploring** potential  
actions to grow  
transplant volumes

**Choosing** to commit  
to actions and next  
steps

**Generating**  
positive energy,  
together

# Join together with a positive spirit



What we think...

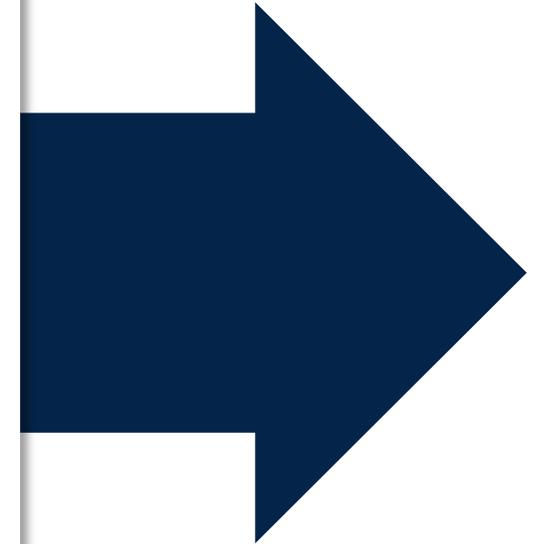


What we say... and

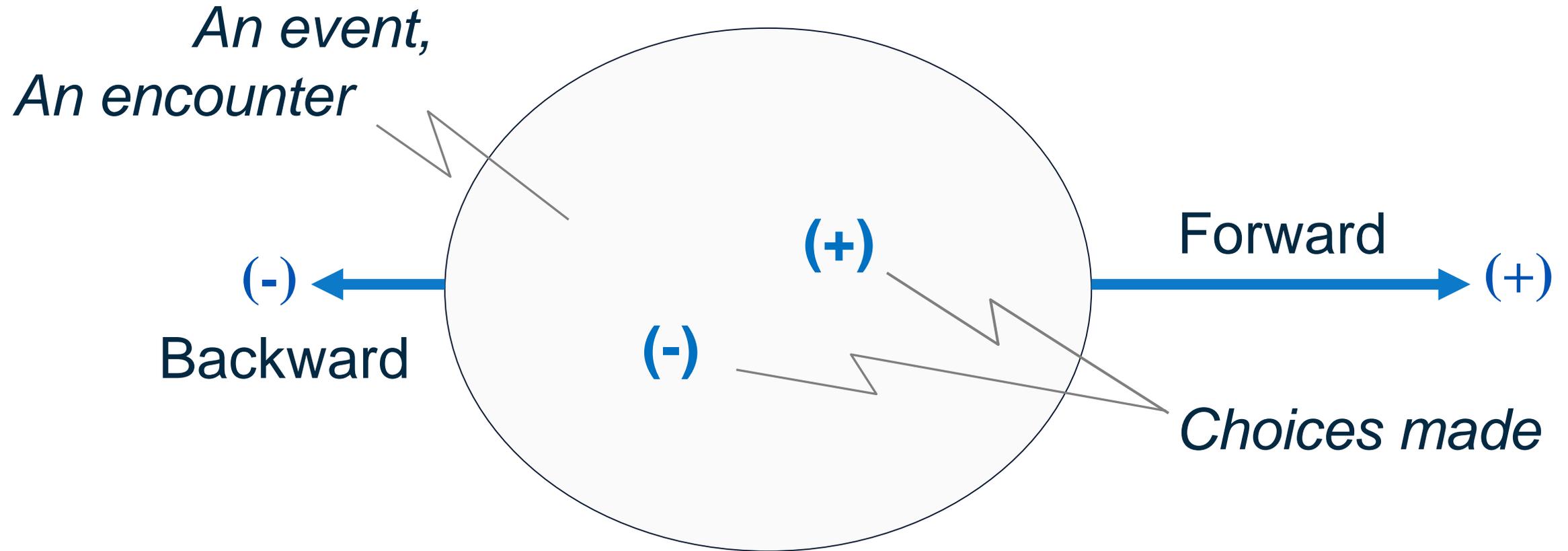


What we spread to others

Makes all  
the  
difference.



# Intentionally choosing the positive to generate forward energy





# Examples of energy choices we make ...often not consciously

## Negative Energy

- Frustrated with problems
- What we can't do
- What we don't have
- What we don't like
- Why is this happening to me?

## Positive Energy

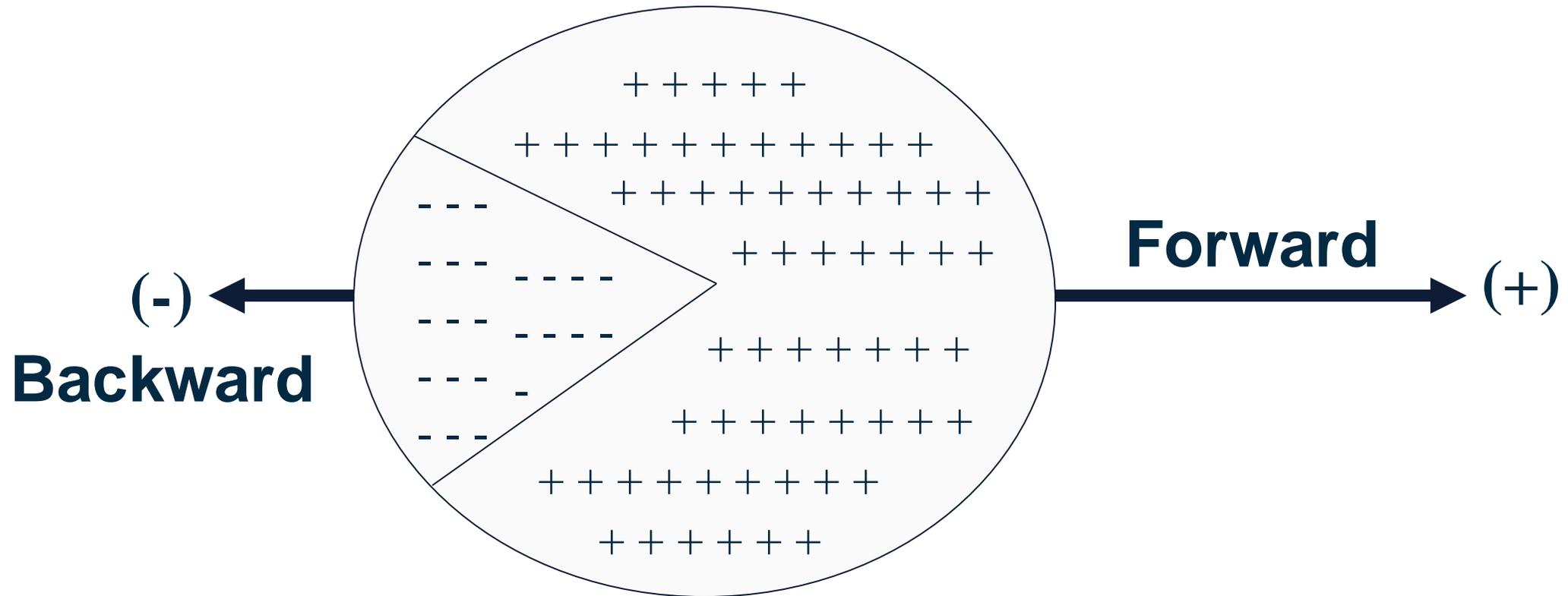
- Expecting problems
- What we can do
- What we do have
- What we do like
- Why is this happening for me?

**Leadership starts with leading ourselves.**

# Shared positive energy will move all of us forward



*More positives than negatives*





# Leadership starts with leading ourselves

- Here's what HRSA needs to do to enable us to hit 60,000....
- Here's what CMS needs to do to enable us to hit 60,000...
- Here's what the OPTN needs to do to enable us to hit 60,000...

Yes, and here's what our team can do to enable us to hit 60,000:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

# There are high-growth programs with good outcomes across all organ types



Liver Transplant Program	Transplant Year		Percent Change 2019 to 2024	SRTR Bar Ratings (July 2025 PSRs)		
	2024	2019		1-Year Liver Survival† HR (Bar)	Getting Deceased Donor Liver Faster*	Survival on the Waitlist*
1 AZMC-TX1 Mayo Clinic Hospital Arizona	317	167	90%	5	5	5
2 TXMH-TX1 Houston Methodist Hospital	282	150	88%	4	2	3
3 FLTG-TX1 Tampa General Hospital	274	145	89%	4	4	3
4 UTLD-TX1 Intermountain Medical Center	179	50	258%	5	5	2
5 FLUF-TX1 UF Health Shands Hospital	142	30	373%	5	5	5
6 OHCC-TX1 The Cleveland Clinic Foundation	248	137	81%	3	5	2
7 NYNS-TX1 North Shore Univ. Hospital/Northwell Health	107	1	10600%	4	4	3
8 MABI-TX1 Beth Israel Deaconess Medical Center	123	40	208%	4	5	5
9 CASD-TX1 Univ. of California San Diego Medical Center	144	62	132%	4	4	3
10 VAMC-TX1 VCU Health System Authority, VCUMC	165	84	96%	1	2	3

Based on OPTN data as of 9/8/2025. Only includes TXPs that performed at least 1 transplant in both 2019 and 2024.

# Examples of potential leadership choices for today



- Whether to pursue growth in transplant volumes in our hospital
- What growth goals to establish for the coming year and beyond
- Whether to test and adapt proven practices from other centers
- What practices to try first, second, third
- How soon to start
- How hard to try



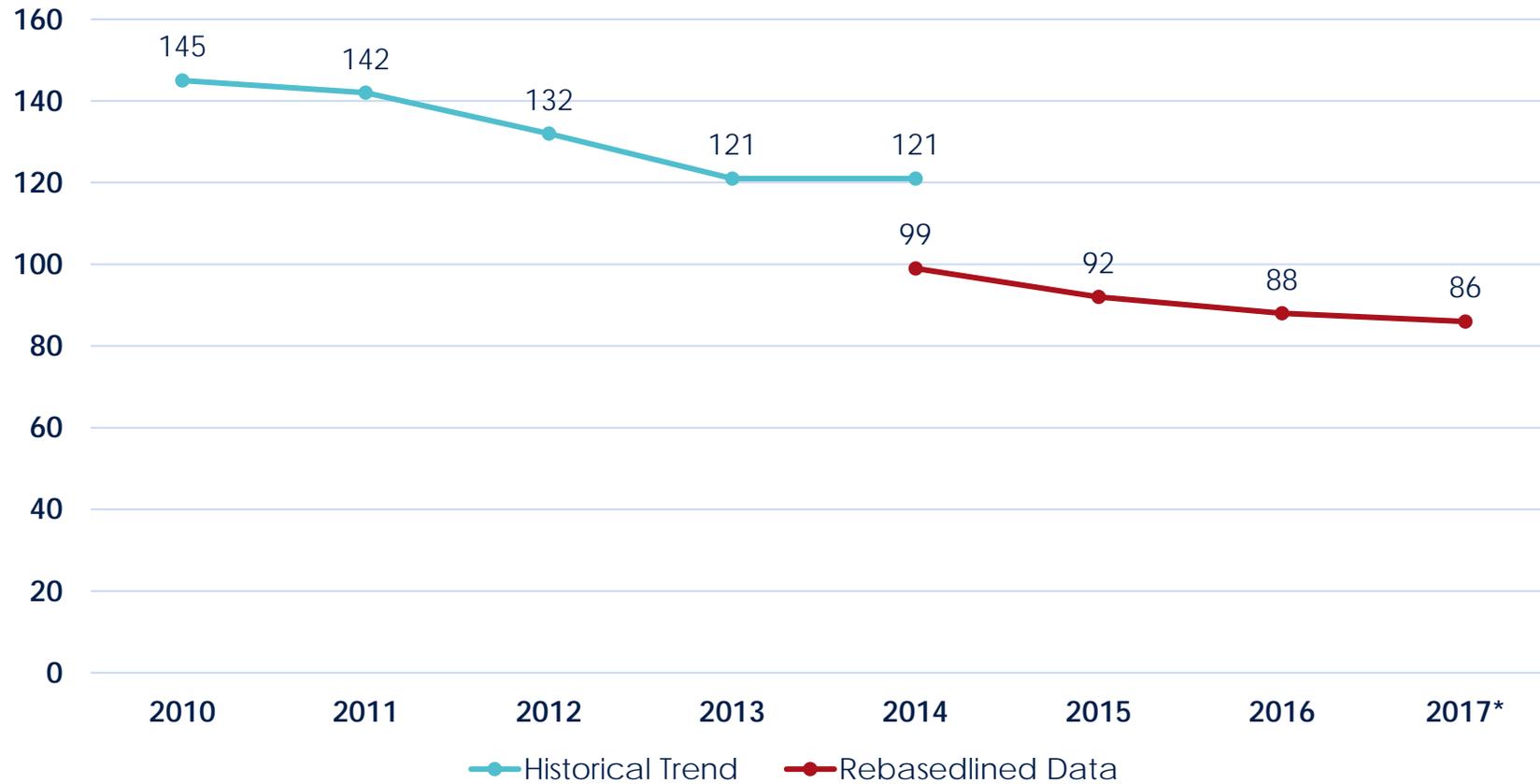
**Bob and Barb Malizzo, along with daughter Kristina Chavez and her son Adrian, visit their daughter Michelle Ballog's grave at Graceland Cemetery in Valparaiso, Indiana. She died after a medical error was made during surgery. (Heather Charles/Chicago Tribune)**

**Bob & Barb Malizzos' leadership story contributed to national results on hospital safety**

# The Malizzos' leadership choices had impact: National improvements on hospital patient safety



### Hospital – Acquired Conditions (HACs) Rate Per 1,000 Hospital Discharges United States, 2010 – 2017



Source: Agency for Healthcare Research and Quality, National Scorecard Data 2020



# Call to Action

---

Dianne LaPointe Rudow

**Where we have been**

**Where we are today**

**Where we can choose  
to go next...**





# Questions to Run On

- How can bold aims drive growth?
- Where are we now with former Expeditious Task Force work to achieve 60,000 successful deceased donor transplants?
- What is currently planned to sustain and augment progress?
- What more can/should we do as a grassroots community of practice, given the absence of federal funding and support for this work?

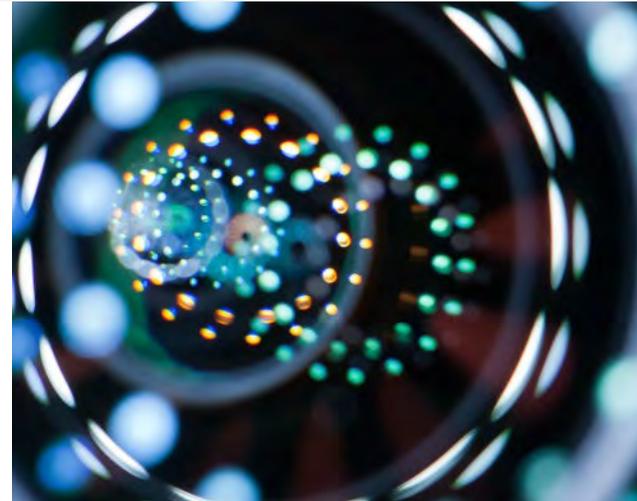


# Transplant is at an inflection point.

*There is opportunity & energy for improvement.*



The number of patients suffering from organ failure is increasing.



Government actions are currently more focused on contracting and oversight on issues like AOOS, DCD, & NRP.

Deceased organ donation has outpaced growth in transplant for many years, resulting in problematic organ non-use.



New technology allows for optimizing organs, increasing transplant opportunities.





# The story begins...

In 2023, the OPTN Expeditious Task Force was created to find pathways to **increase the number of successful adult and pediatric deceased donor transplants and improve organ allocation efficiency.**

**Working together, we can save thousands of more lives.**

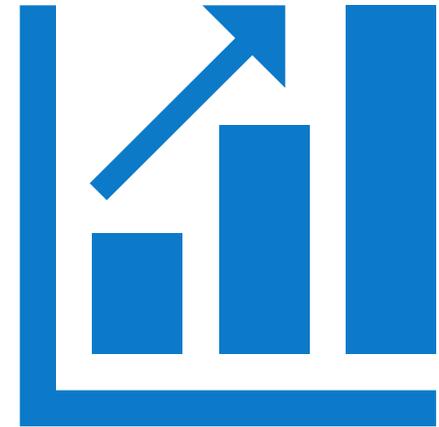
# Transplant growth is *not* keeping pace with increases in deceased donation.

## Change from 2019 to 2024

Donors up 7.4% annually (43% over last 5 years)

---

- Kidney transplants up 5.2% annually (29% over last 5 years)
- Liver transplants up 5.3% annually (30% over last 5 years)
- Heart transplants up 5.2% annually (29% over last 5 years)
- Lung transplants up 4.2% annually (23% over last 5 years)



*Every year transplant rates lag behind donation rates, we create a **bigger non-use rate** and fall further behind.*

# Our Shared Bold Aim



Aiming to achieve **60K** annual successful deceased donor organ transplants.

This Bold Aim defines success and will drive progress, growth, and efficiency in adult and pediatric organ transplantation.

The OPTN Board and HRSA embraced our Bold Aim to achieve 60,000 successful deceased donor transplants.



# Calculation of the Growth Goal

Organ	Annual Growth: All Centers, 2018-2023	Annual Growth: Top 20% of Centers, 2018-2023	Number of Deceased Donor Transplants in 2026 if All Grew Like Top 20%
Lung	3.5%	18.8%	5,078
Heart	5.3%	16.1%	7,106
Liver	4.7%	14.8%	15,126
Kidney	7.4%	14.9%	31,933

**If all transplant programs grew at the rate of the top 20%, we could achieve nearly 60,000 deceased donor transplants in 2026; status quo growth would result in only 46,245 transplants.**



Only includes programs active in both 2018 and 2023. Counts are for deceased donor transplants.



# Call to Action

**Help us achieve the 60,000 transplants aim by committing to sustaining and expanding growth in your programs.**

- 1. Decide to grow.** Commitment starts with a decision.
- 2. Identify barriers to growth** at your program so that you can develop solutions to overcome them.
- 3. Learn from others** who have overcome similar challenges.
- 4. Help others grow; share your solutions.**
- 5. Join with the grassroots movement in committing to the aim of 60,000 successful deceased donor transplants.**



# Bottom Line First: An Overarching Assessment

What's true:	Yes, and...	We believe we should:
We're currently not on track to meet the goal as soon as 2026	<p>An overwhelming number of transplant centers that participate in TGC events are choosing to commit to ambitious growth goals</p> <p>Some centers are achieving success on their bold goals</p> <p>New partners have stepped up to support this work in significant ways</p> <p>For the first time in recent history, we are on track to decrease the non-use rate</p>	<p>Collectively work to help more centers choose to grow and achieve their goals</p> <p>Learn from, celebrate, and spread the work of OPOs and the practices of sustained and new high-growth centers</p> <p>Find ways to support and replicate the IHI LBE Lung Collaborative to other organ types</p>
HRSA has stopped supporting the ETF and the community is not getting the “full court press” that would help us reach our goal faster	The community has adopted pursuit of the goal as a grassroots effort	Continue teaming with each other to sustain, expand, and accelerate shared progress



# 2024 | More transplants than ever before



**3.3%**  
increase  
over 2023\*

Exceeded

**48,000**

lifesaving transplants total\*



**23.3%**  
increase  
since 2020\*

 **Thanks to generous organ donors!**

\*Based on OPTN data as of Jan. 10, 2025.  
Data subject to change based on future data submission or correction

# 2024 Donation and Transplant Trends

---

More than **41,000** transplants from deceased donors

---

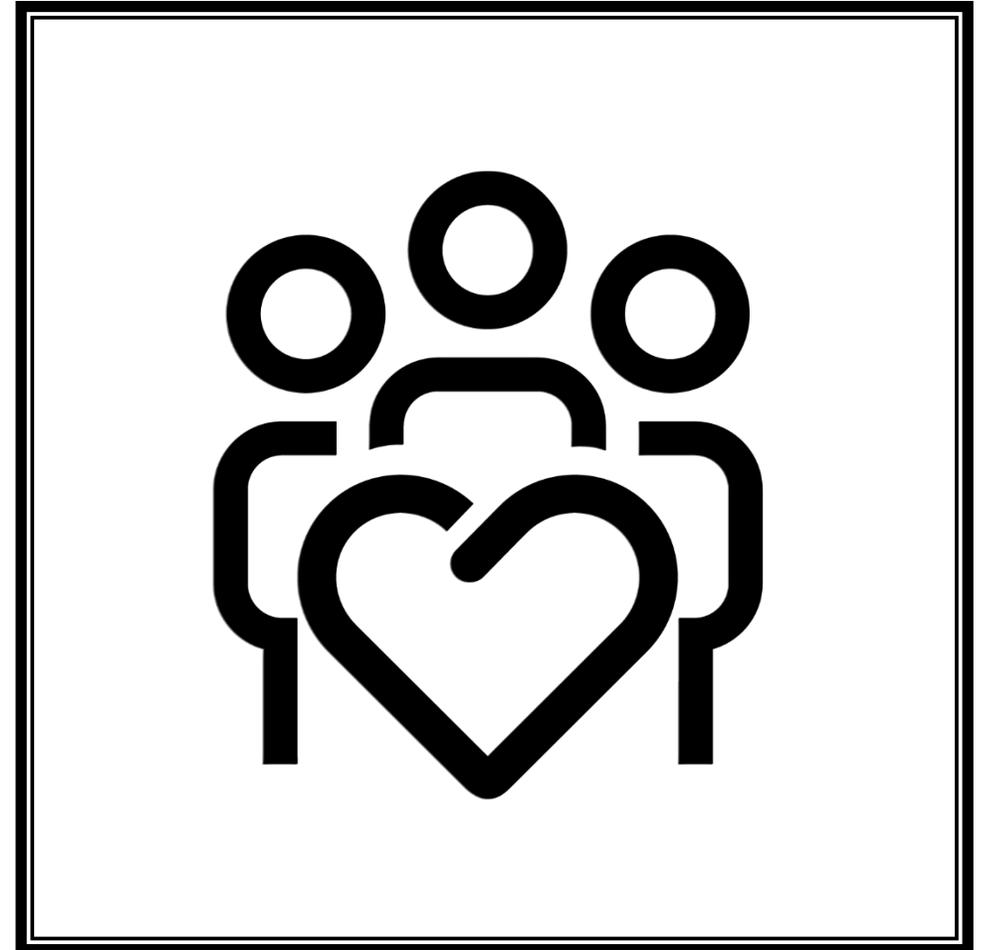
More than **7,000** transplants from living donors

---

**10.4%** more lung transplants than in 2023 – **3,340** total

---

**7,280** DCD donors – **23.5%** increase from 2023





# The data narrative supporting our shared focus on transplant growth is compelling

- While transplantation is growing nationally, it is **growing more slowly** than donation
- At the same time, some transplant programs have grown their volumes by **100%, 200%, 300%**, or more over the last 5 years
- These programs have achieved this growth within all the constraints of the current system
- High-growth transplant programs have **consistently better patient outcomes** than programs that are maintaining or shrinking in volume

*Shared work to grow transplant volumes is the right work at the right time.  
It is within our individual and collective power to do this work.*

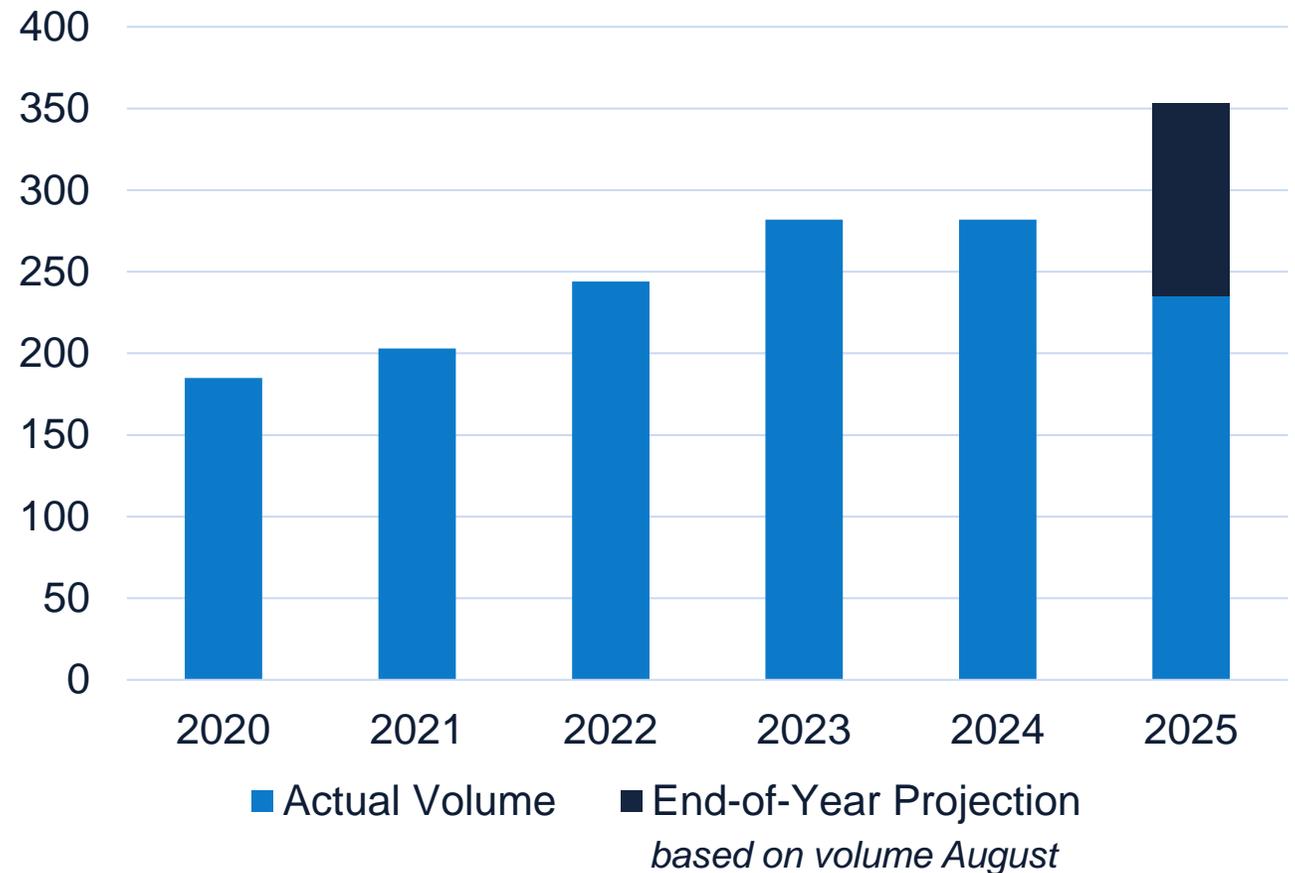


# Congratulations and thank you!



Thanks to generous donors and the work of LifeSource OPO, donation in MN, ND, and SD is on pace for a 91% increase over 2020.

### LifeSource OPO Deceased Donor Volumes



# OPOs supporting growth by hosting events!



# TGC faculty from across the country have shared their success strategies!

**UT Southwestern**  
Medical Center

MAYO  
CLINIC

  
**Advent Health**

 **Cleveland Clinic**

 **Intermountain Health**

**HENRY  
FORD  
HEALTH**

 **Methodist**  
HOSPITAL | SPECIALTY AND TRANSPLANT

 **NYU Langone Health**

HOUSTON  
**Methodist**  
LEADING MEDICINE

 **Baylor St. Luke's  
Medical Center**



 **HEALTH**  
UNIVERSITY OF MINNESOTA

 **Hackensack  
Meridian Health**

 **HEALTH**  
UNIVERSITY OF UTAH

 **VCU Health**  
Hume-Lee  
Transplant Center

 **Virtua Health**

 **UF Health**  
UNIVERSITY OF FLORIDA HEALTH

 **Inova**<sup>TM</sup>

 **Children's Mercy  
HOSPITALS & CLINICS**  
Kansas City

 **Duke Transplant Center**

 **Cedars Sinai  
Health System**

**UCSF Health**

**UC San Diego Health**

# Community partners have contributed to the growth goal



**ASTS**  
American Society of  
Transplant Surgeons



**sanofi**



**Sharing  
Network  
Foundation**



# QUALITATIVE IMPACT

**Here's what we have heard from your peers about these events.**



*"I am motivated to do more."*

*"Fabulous collaboration and ideas that are actionable."*

*"Incredible to be a part of."*

*"Energizing and inspiring."*

*"The collaboration was exceptional."*

*"Please continue these. Really remarkable calls to action."*

*"Beautifully organized. Worthy goal and motivating."*

*"Created meaningful dialogue and actions to take."*

*"Need more of these collaborations."*

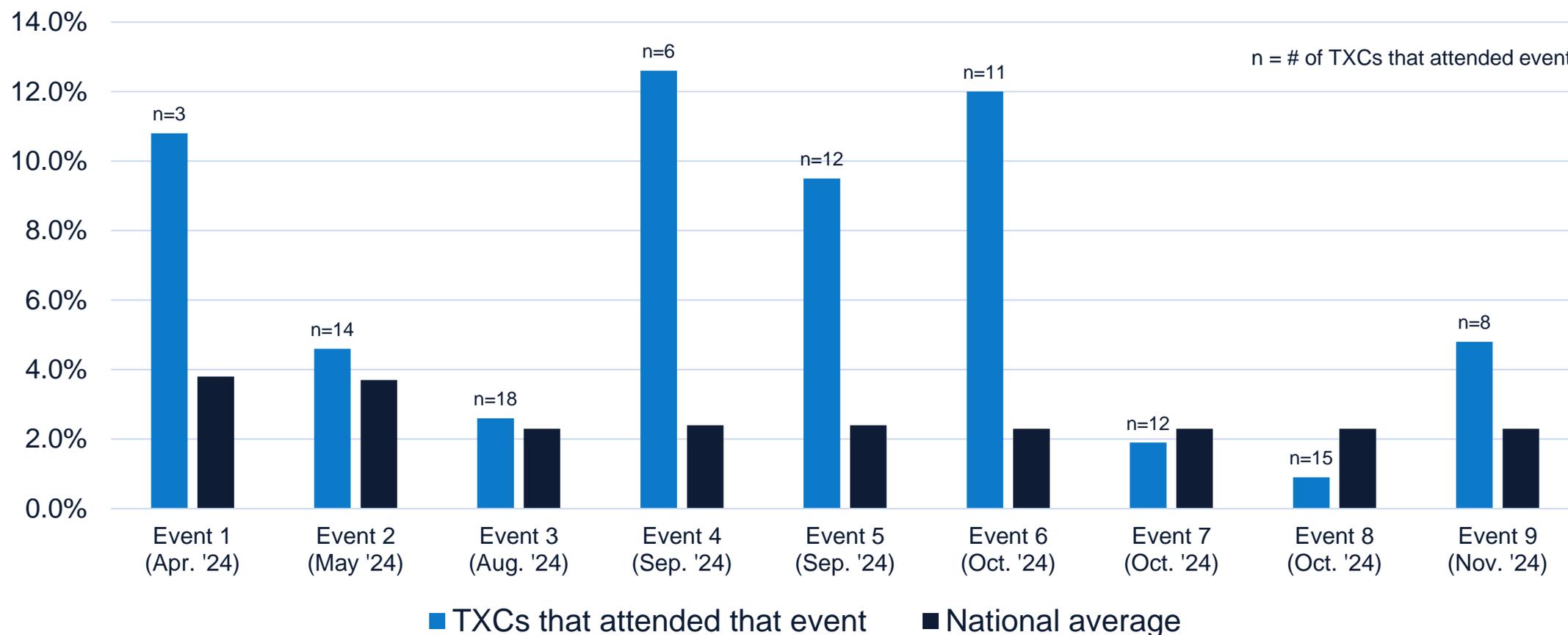
*"I've heard about the bold aim of 60,000 transplants, but after today I am prepared and excited to take action."*

*"Great presentations to foster creative problem solving and new approaches."*



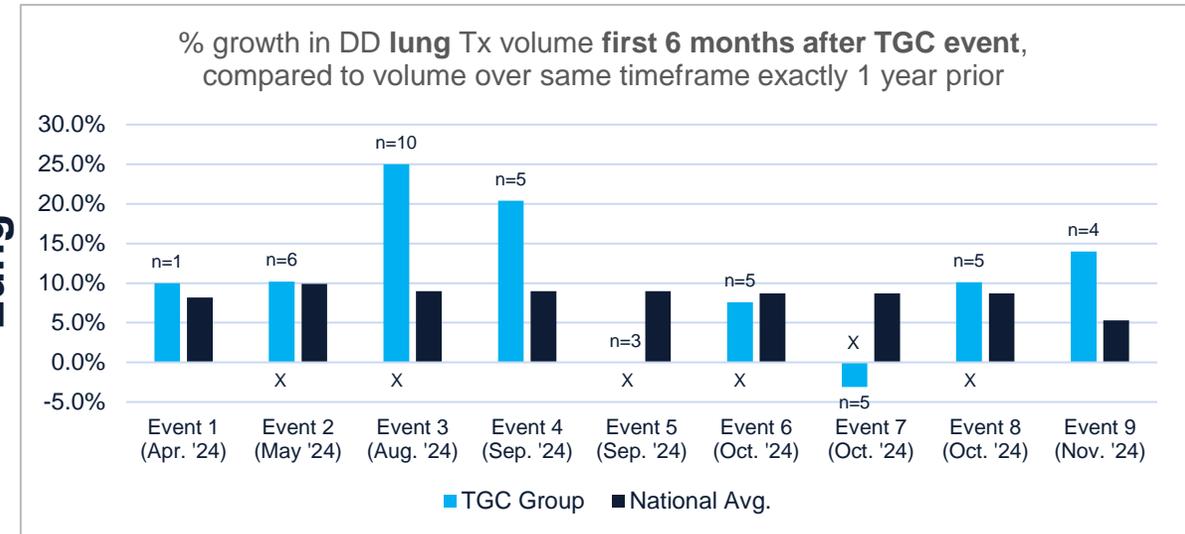
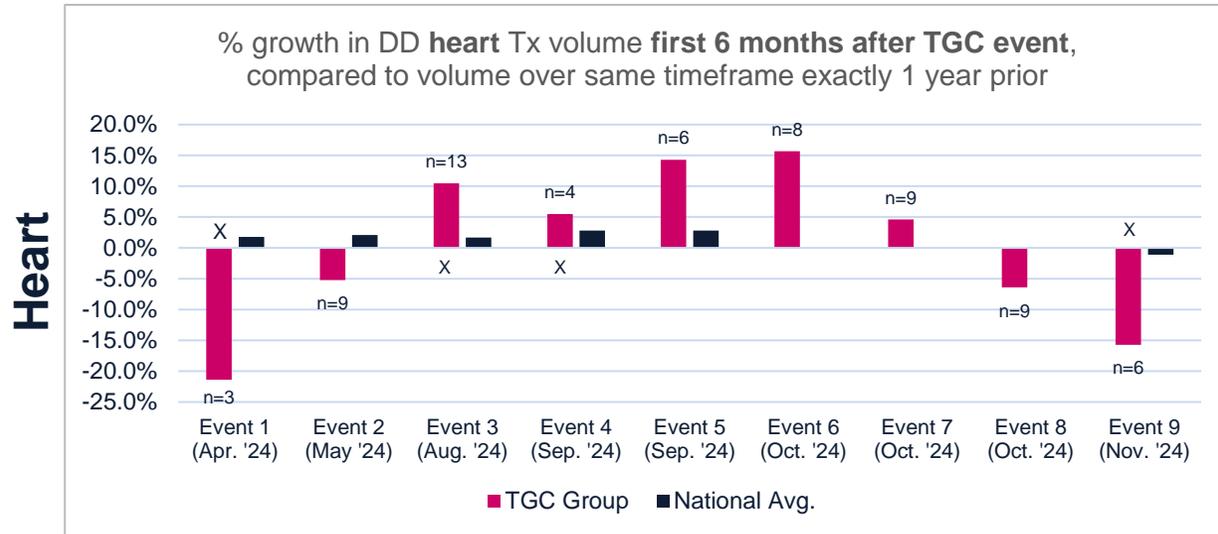
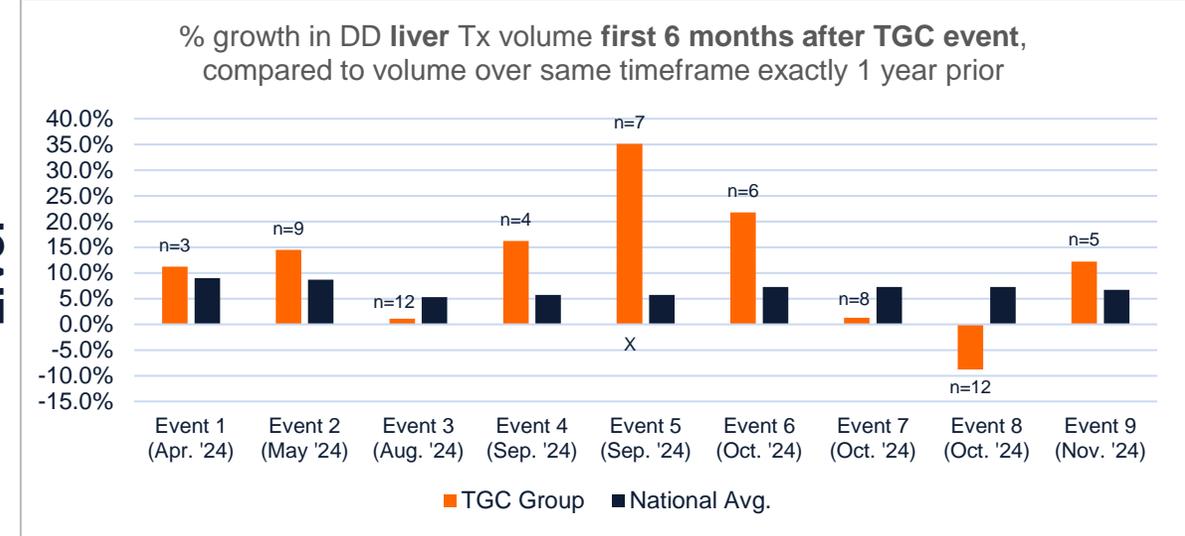
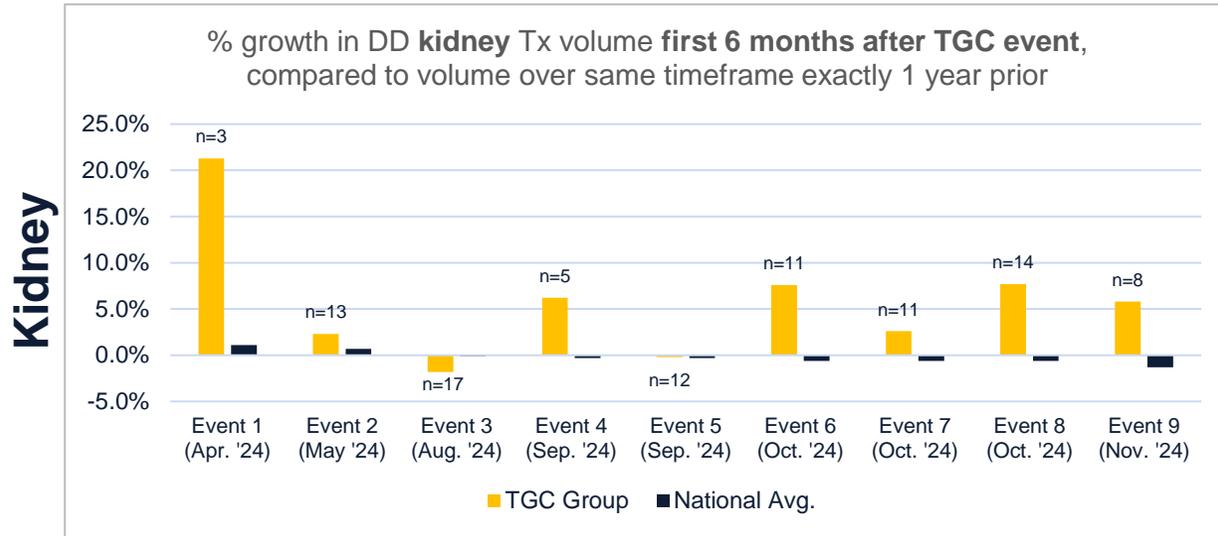
# Have the TGC events made an impact?

% growth in DD Tx volume **first 6 months after TGC event**, compared to volume over same timeframe exactly 1 year prior





# Have the TGC events made an impact?



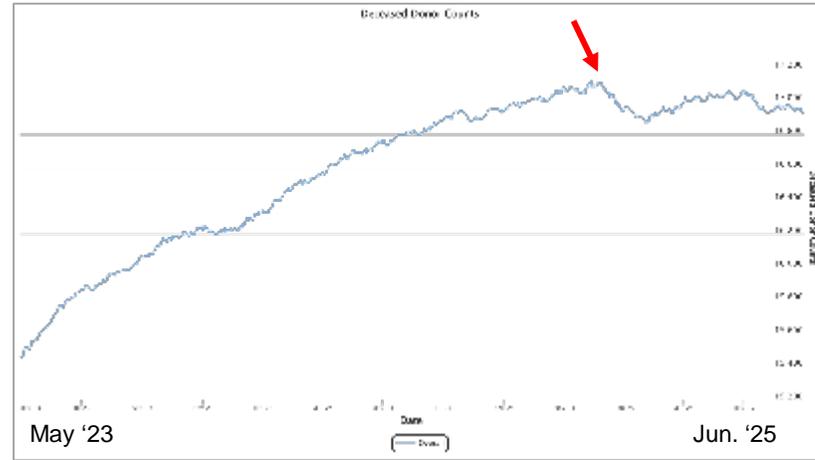
X: Event did not feature high-growth program of given organ type



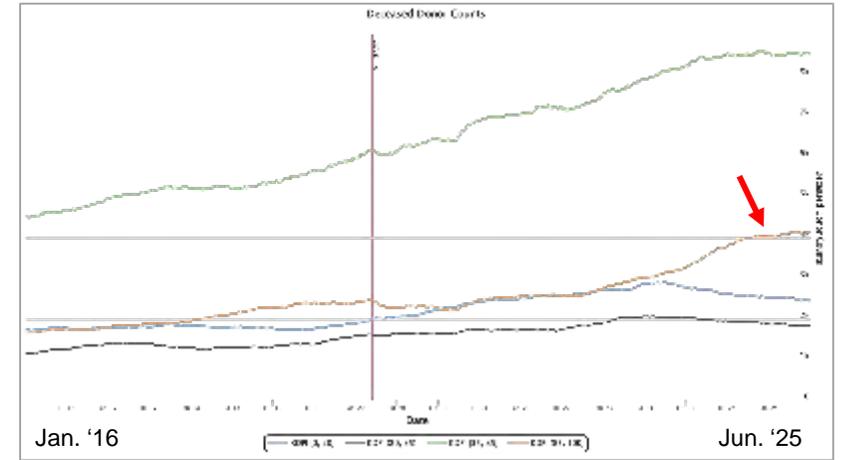
# Headwinds on the path to 60,000 transplants



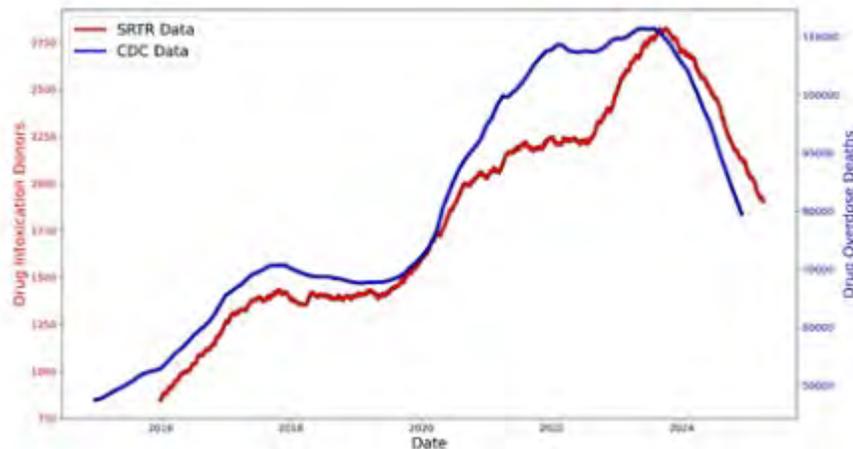
Deceased donation is down since Dec. 2024



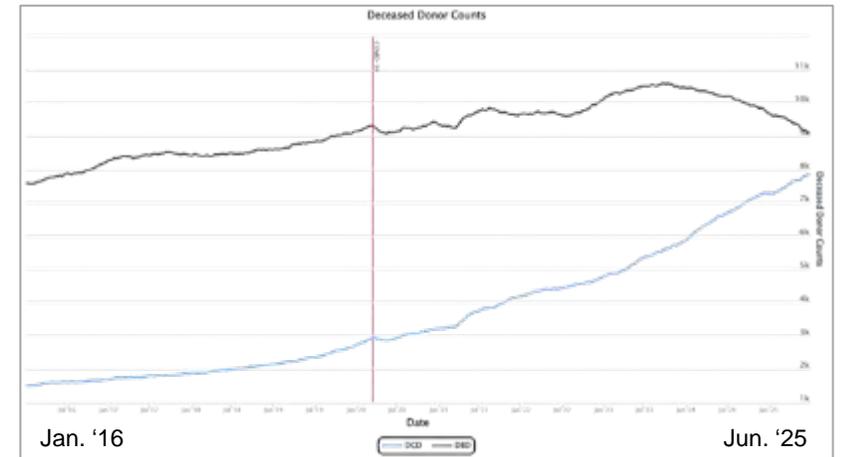
Donors with a KDPI >85 have increased



Yearly # of drug overdose deaths (blue); # of donors resulting from drug intoxication (red)



DCD donors are rising; BD donors are falling



\*Sources: CDC data: <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>, accessed June 2, 2025; SRTR data: <https://www.srtr.org/tools/donation-and-transplant-system-explorer/2> accessed July 23, 2025.



# Headwinds on the path to 60,000 transplants



## Deceased donation is down since Dec. 2024



## Donors with a KDPI >85 have increased



## Yearly donor



**OPTN** Organ Procurement & Transplantation Network

U.S. Department of Health & Human Services **HRSA**

About Policies & bylaws Patients Professionals Data & calculators News & events

Home » News » Staying compliant: What you need to know about AOOS

### Staying compliant: What you need to know about AOOS

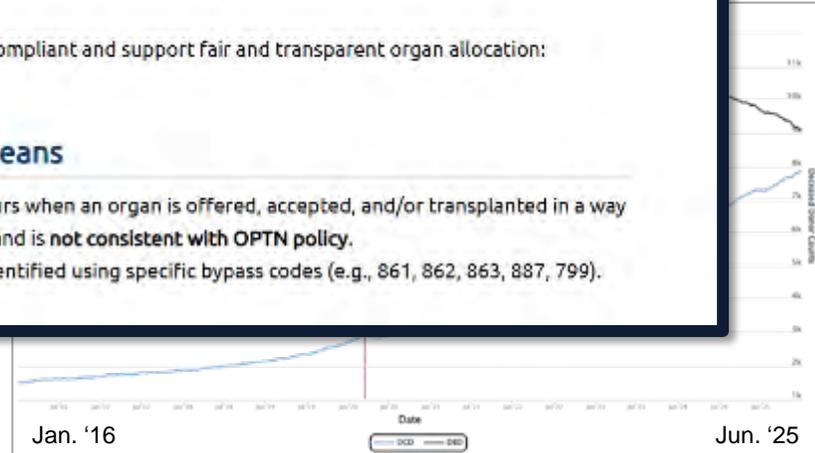
Published on: Monday, August 11, 2025

The Organ Procurement and Transplantation Network (OPTN), under the direction of HRSA, is strengthening oversight of organ **Allocations Out of Sequence (AOOS)** to ensure fairness, transparency, and optimal use of donated organs.

Here's how your organization can stay compliant and support fair and transparent organ allocation:

#### Understand What AOOS Means

- Operational Definition:** AOOS occurs when an organ is offered, accepted, and/or transplanted in a way that deviates from the match run and is not consistent with OPTN policy.
- Analytical Assessment:** AOOS is identified using specific bypass codes (e.g., 861, 862, 863, 887, 799).



\*Sources: CDC data: <https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>, accessed June 2, 2025; SRTR data: <https://www.srtr.org/tools/donation-and-transplant-system-explorer/2> accessed July 23, 2025.



**We also have  
the tailwinds  
needed to  
achieve our  
goal**



- ✓ We know how to successfully grow transplant volumes; the Change Package documents how to do this
- ✓ Transplant programs who choose to grow are succeeding in this work
- ✓ Technology advancements and innovation drive growth
- ✓ We are adding donation to Growth Collaboration work
- ✓ Expansion of collaboration across OPOs, transplant programs, and industry partners
- ✓ Transplant, donation, and community partners are working together like never before

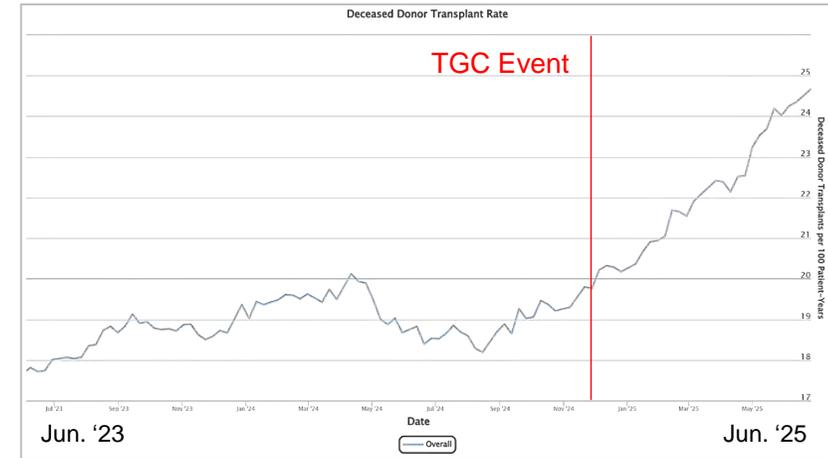


# Program growth after TGC participation

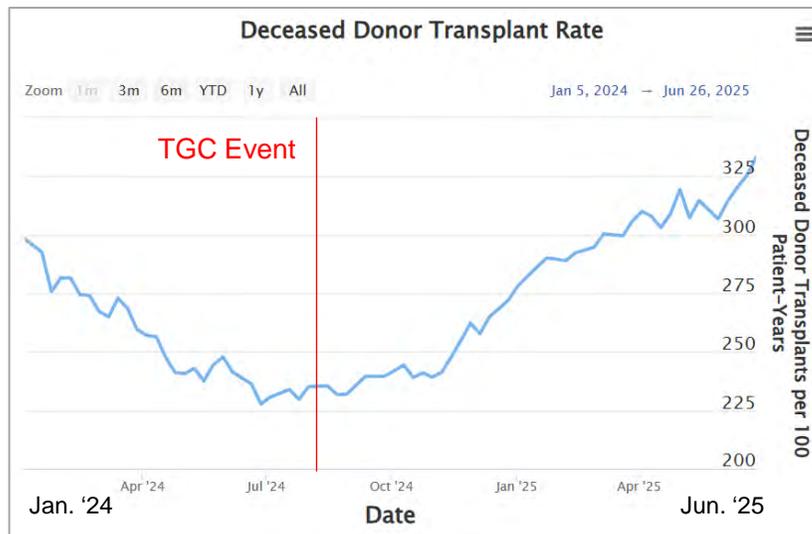
## UTLD Kidney Program Growth



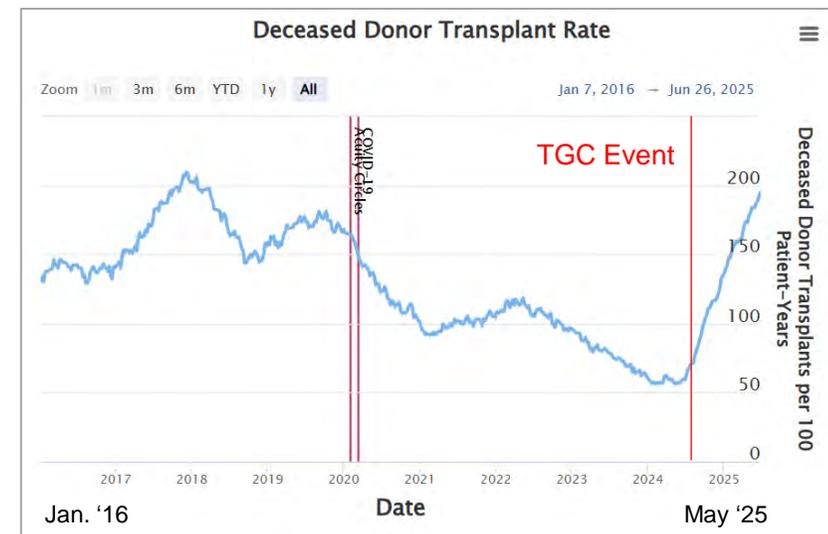
## GAEM Kidney Program Growth



## OHCC Lung Program Growth



## SCMU Liver Program Growth





# Leadership starts with leading ourselves

We're not on track to hit the goal in 2026, so we should pack it in



We're making progress, having impact, and benefiting patients, so we choose to press forward in pursuit of the 60,000 goal in 2027

*Pursuit of Bold Aims rarely means everything is under control and things are going great – serious headwinds are usually part of the challenge with transformational change.*

# Transplant growth change package is an asset for propelling growth.



Interviews conducted with transplant programs who have demonstrated growth success:

- Included heart, liver, lung, and kidney transplant programs (13 programs total)
- Interviews identified common themes and testable actions
- Programs reviewed Change Package draft and provided feedback to ensure accuracy



<https://www.organdonationalliance.org/wp-content/uploads/2025/07/Change-Package-for-Transplant-Growth.pdf>



# Transplant Growth Change Package

<b>Strategy</b>	<b>Title</b>	<b># Change Concepts</b>	<b># Testable Actions</b>
1	Chart an Intentional Growth Journey	4	13
2	Create a Culture for Growth	4	11
3	Find a Way to Say Yes	4	12
4	Expand and Enhance Patient Access	3	11
5	Create Capacity for Growth Through Community Partnerships	4	11



# Thank you to these transplant programs that provided input and feedback!

- Mayo Clinic Hospital Florida, Heart Program
- UF Health Shands Hospital, Liver Program
- Children's Mercy Hospital, Pediatric Liver Program
- Duke University Hospital, Heart Program
- Hackensack University Medical Center, Kidney Program
- NYU Langone Health, Heart Program, Lung Program
- The Cleveland Clinic Foundation, Kidney Program
- Houston Methodist Hospital, Liver Program
- UT Southwestern Medical Center, Kidney Program
- Intermountain Medical Center, Liver Program
- University of California San Diego Medical Center, Liver Program
- University of Utah Medical Center, Lung Program
- VCU Health System Authority, VCUMC, Liver Program



# Alliance leadership is engaging the broader community for growth



**Industry & Community Collaborative Meeting**

January 15, 2025

**THE Alliance**

*Equipping a Modern Profession of Lifesavers in Organ Donation & Transplantation*



## Industry Partners

<b>Bridge to Life</b> Aaron Gilchrist, VP of Sales	<b>Invivo Healthcare Technologies</b> Wade Liu, Chief Product Officer	<b>Specialist Direct</b> Scott Rombach, CEO
<b>Bristol Myer Squibb</b> Kimi Ueda, Director	<b>LifeLogics</b> Stacey Smith, Senior Director	<b>Trinity Medical Solutions</b> Scott Wunsch, CEO
<b>CareDx</b> Koren Axelrod, Lead, Strategic Partnerships	<b>Lung Bioengineering</b> Brandi Zofkie, Associate VP Dr. Jeffrey Salvon-Harman, VP	<b>Veloxis Pharmaceuticals</b> Eric Hedge, VP of Sales Brian Turner, VP of Marketing
<b>CompuMed</b> Lee Keddle, CEO	<b>NORA</b> Rob Lewis, CEO	<b>XVIVO</b> Robert Baumann, VP Commercial, NA
<b>Donor Staff Support</b> Jason Linley, COO	<b>Organ Recovery Systems</b> Matthew Copithorne, VP, Sales & Marketing	
<b>DonorLink LLC</b> Michelle Macatee, CEO	<b>Paragonix</b> Richard Rothweiler, National Dir. Strategic Partnerships	
<b>Global Transplant Solutions</b> Burt Mattice, COO	<b>ProCure On-Demand</b> Gregory Bittle, MD, Chief of Procurement Services	
<b>Guldry &amp; East</b> Barry Friedman, Partner	<b>Pulse Charter Connect</b> Laura Epstein, CEO	
<b>iiAM</b> Gina Dunne Smith, Executive Director		

1. Virtual event, December 6, 2025
2. Phoenix AZ, in-person, January 15, 2025
3. Nashville TN, in-person, March 18, 2025

# Lung Transplant Growth Collaborative

## Objectives:

1. Increase lung transplantation 30% in participating transplant programs
2. Refine and improve the initial Change Package to optimize successful transplant program practices
3. Evaluate the sustainability and effectiveness of proposed measures
4. Generate and document insights that can inform future work to increase and improve lung transplantation

## Phase 1

Jul 2024 –  
Mar 2025

### Project Activation (9 months)

- Expert Meetings to identify key drivers of growth for lung transplantation
- Development of initial Change Package and Measurement Strategy
- Recruit hospitals for the collaborative

## Phase 2

Apr 2025 –  
Jun 2026

### Collaborative (14 months)

- Learning sessions
- Action periods
- Data collection
- Refining Change Package

## Phase 3

Jul – Sep  
2026

### Synthesize & Disseminate (2 months)

- Synthesizing insights gathered throughout the Collaborative
- Finalize dissemination outputs

**25 Months Total**

# 60,000 deceased donor transplants

*51.2% increase from 39,680 in 2023*

**A Reasonable  
Question:**

*Can we do  
this?*

**A Better  
Question:**

*How can we  
do this?*

**The Most  
Important  
Question:**

*How can we  
**not** do this?*

**the cost  
savings for  
CMS and other  
payors**

**&**

**the added  
outcomes and  
revenue for the  
transplant  
community**

*Think of...*

**the years & quality  
of life saved for  
patients**

**the gifts honored  
from donor  
families**



# Growth in the Donation and Transplant System

---

Jon Snyder, PhD



# Growth in the Donation and Transplant System

**Jon Snyder, PhD**

Director of Transplant Epidemiology

Chronic Disease Research Group

Hennepin Healthcare Research Institute



**HennepinHealthcare**  
Research Institute

# Disclosures



Director: Scientific Registry of Transplant Recipients. The views expressed are my own and do not necessarily reflect the official policies of the U.S. Department of Health and Human Services nor does mention of trade names, commercial practices, or organizations imply endorsement by the U.S. Government.



Co-investigator. The views expressed are my own and do not necessarily reflect the official policies of the National Institutes of Health.

## **Board of Directors:**

Organ Donation and Transplantation Alliance

## **Clinical Policy Board Member:**

LifeSource

## **Technical Expert Panelist:**

Econometrica, Inc. – AOPO

## **Research Support to My Institution:**

Alexion – Astra Zeneca Rare Disease

American Association of Tissue Banks

DEKA Research

Donate Life America

Veloxis

X-Therma, Inc.



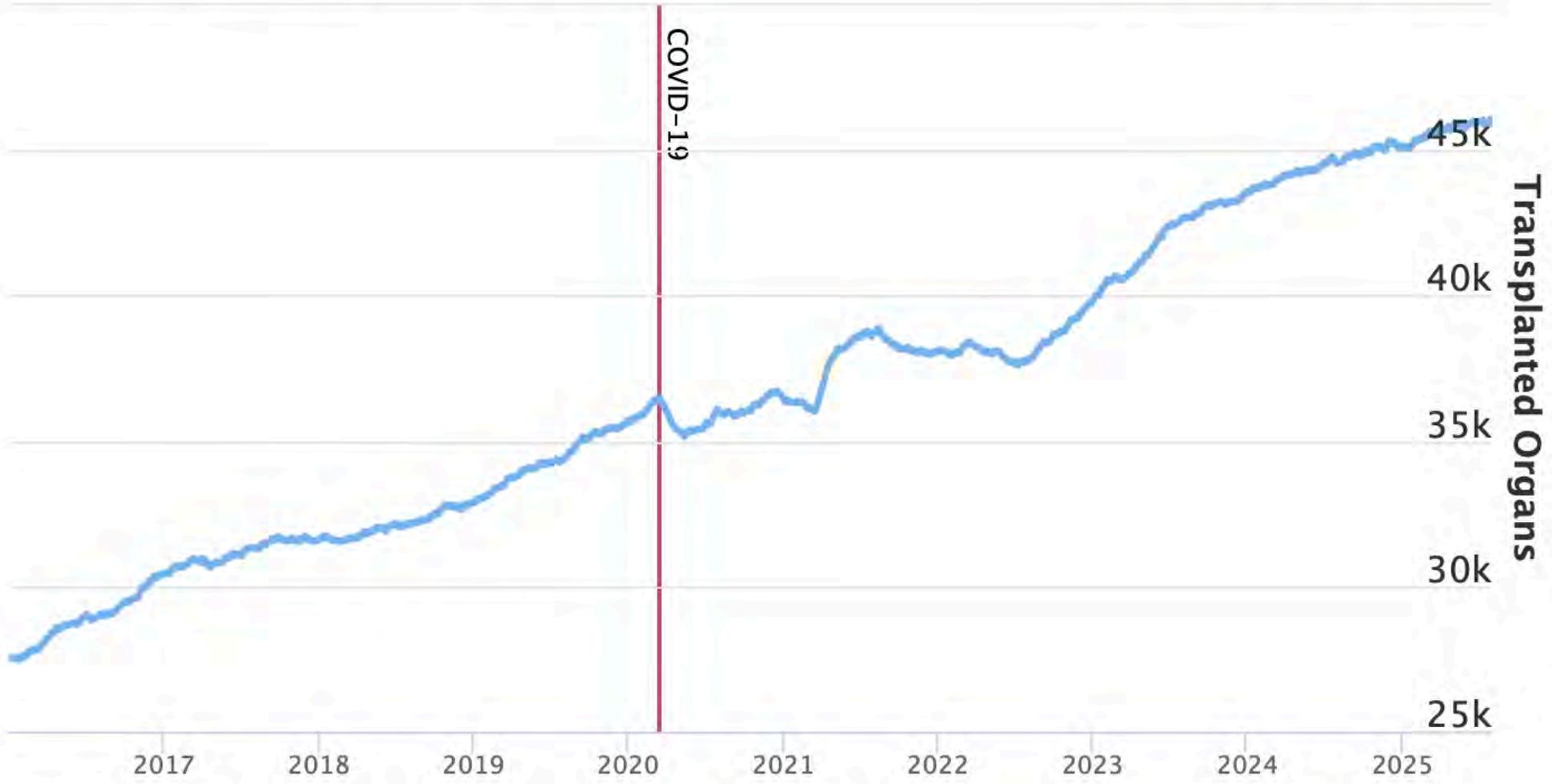
# How are we doing Nationally and Locally?

# Transplanted Organs



Zoom 1m 3m 6m YTD 1y **All**

Jan 2, 2016 → Jul 31, 2025



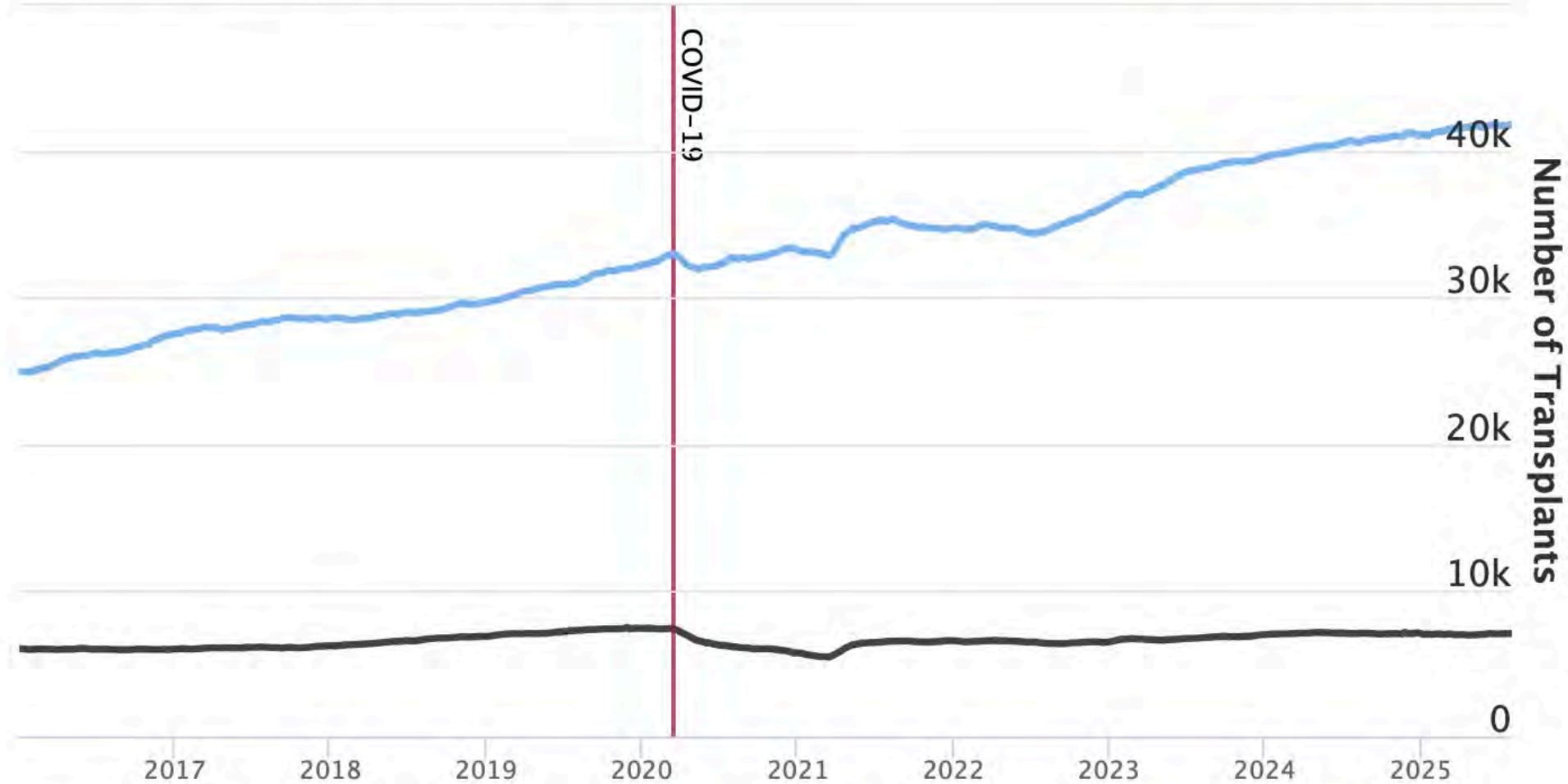
**45,950**  
Annualized  
as of  
7/31/2025

# Transplants



Zoom 1m 3m 6m YTD 1y **All**

Jan 2, 2016 → Aug 2, 2025



**41,868**  
**DD**  
Annualized  
as of  
7/31/2025

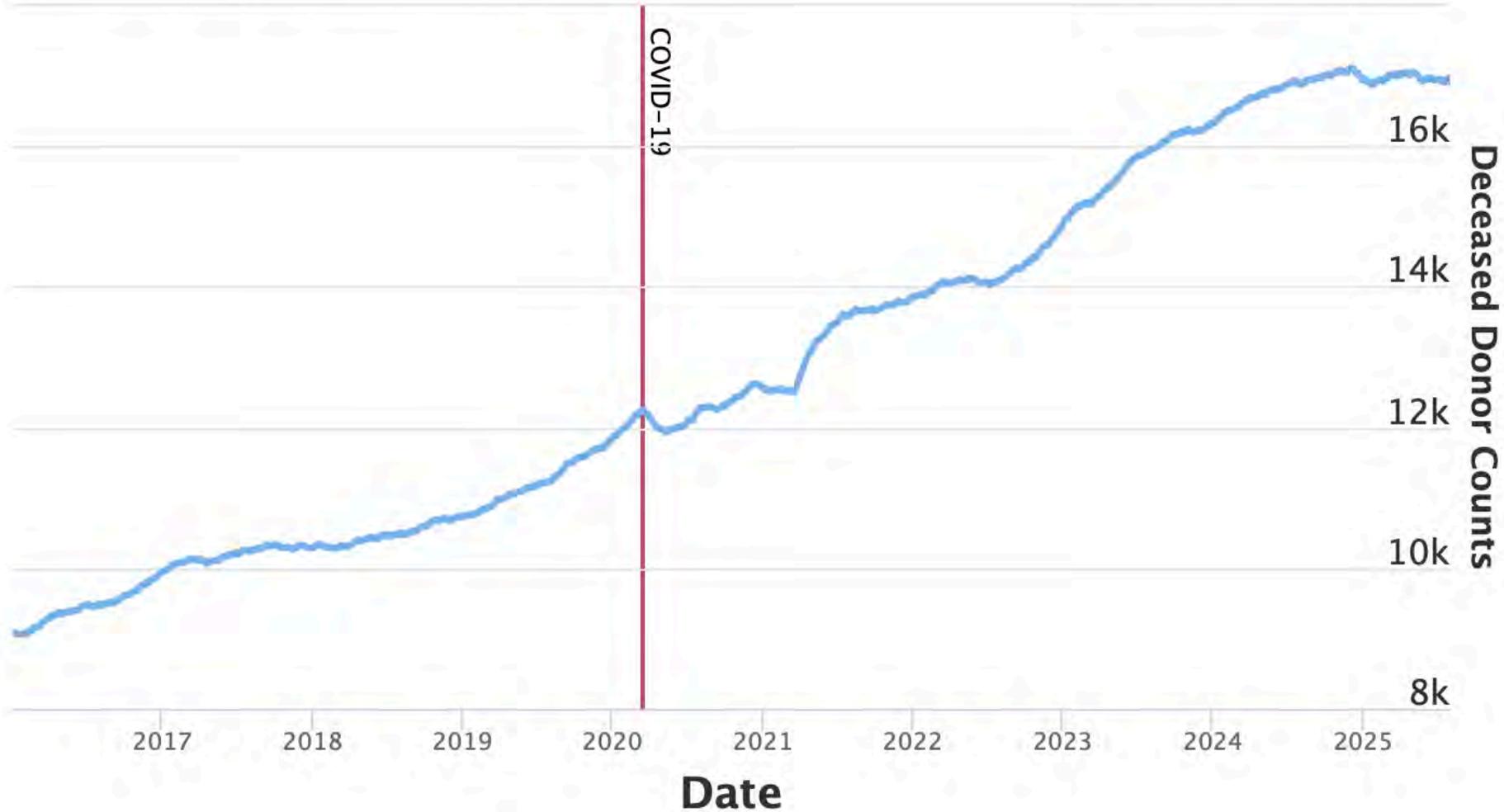
**7,030**  
**LD**  
Annualized  
as of  
7/31/2025

— Deceased Donor — Living Donor

# Deceased Donor Counts

Zoom 1m 3m 6m YTD 1y All

Jan 2, 2016 → Jul 31, 2025



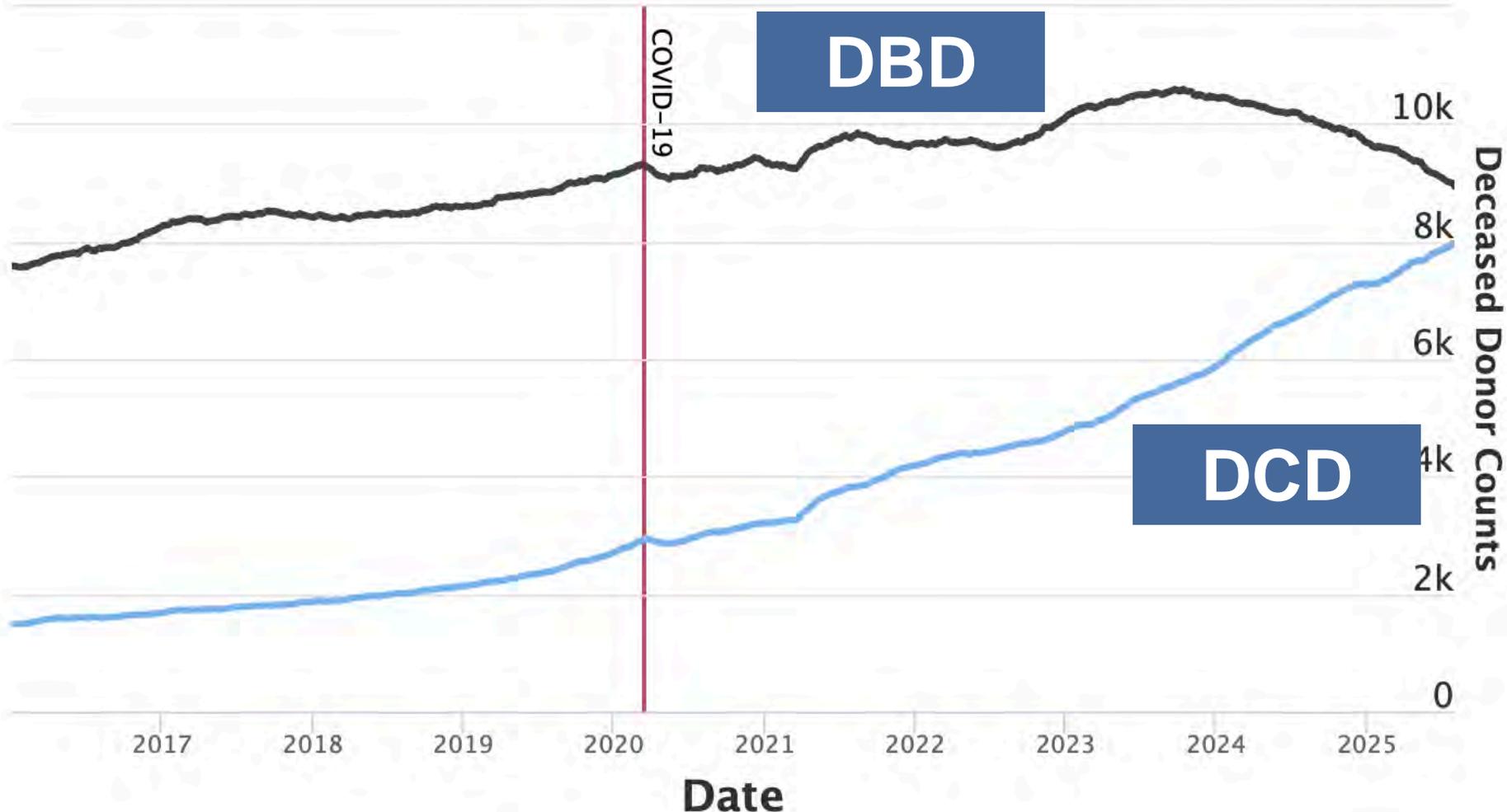
**16,914**  
Annualized  
as of  
7/31/2025

# Deceased Donor Counts



Zoom 1m 3m 6m YTD 1y All

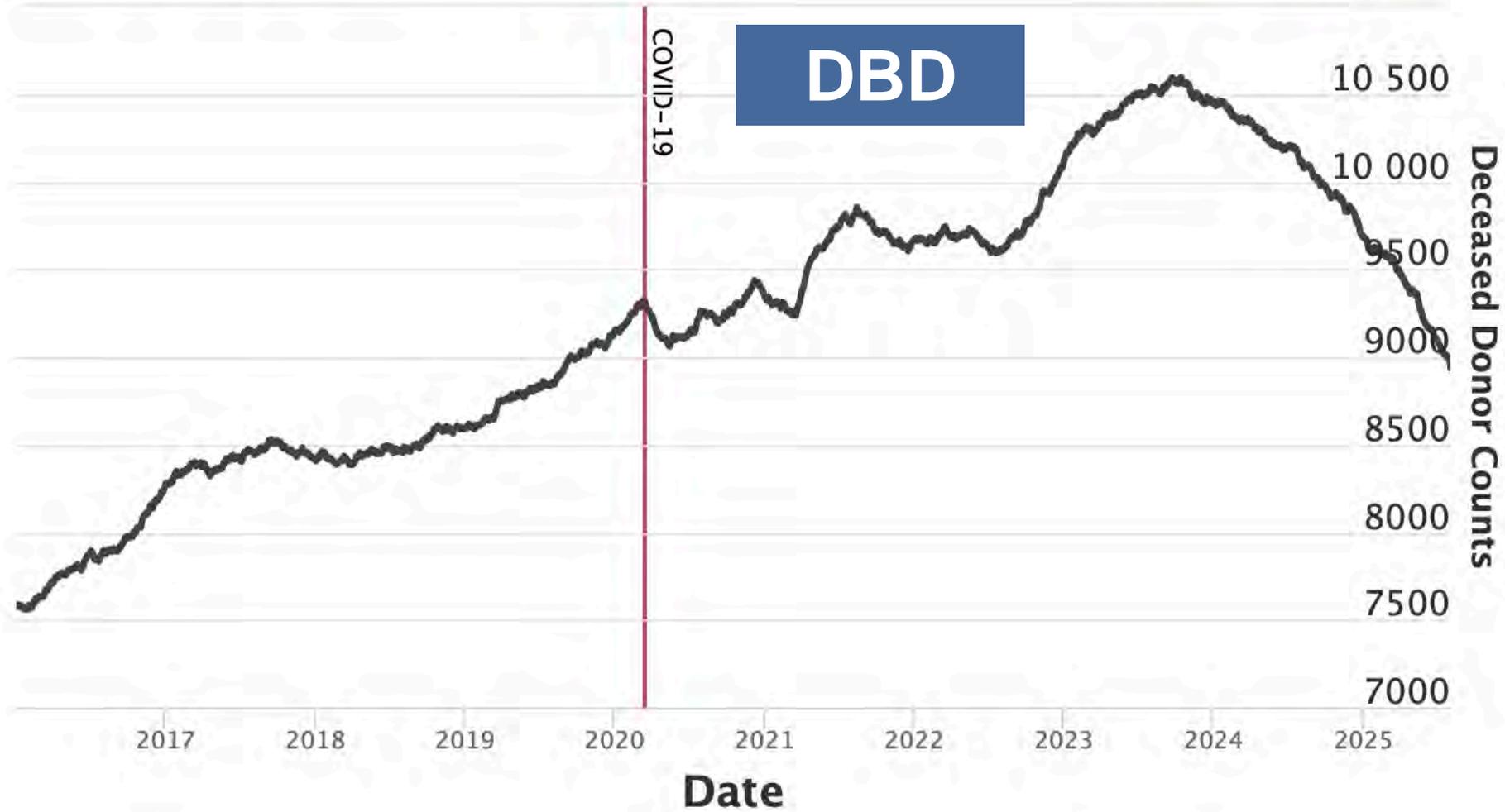
Jan 2, 2016 → Jul 31, 2025



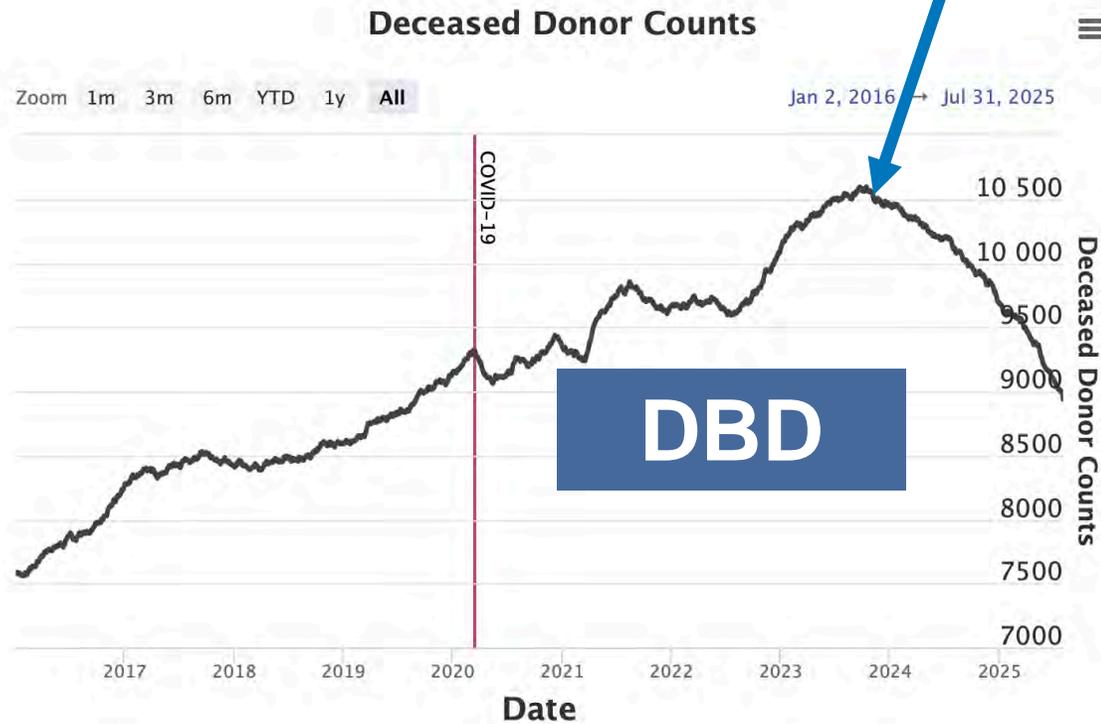
# Deceased Donor Counts

Zoom 1m 3m 6m YTD 1y All

Jan 2, 2016 → Jul 31, 2025

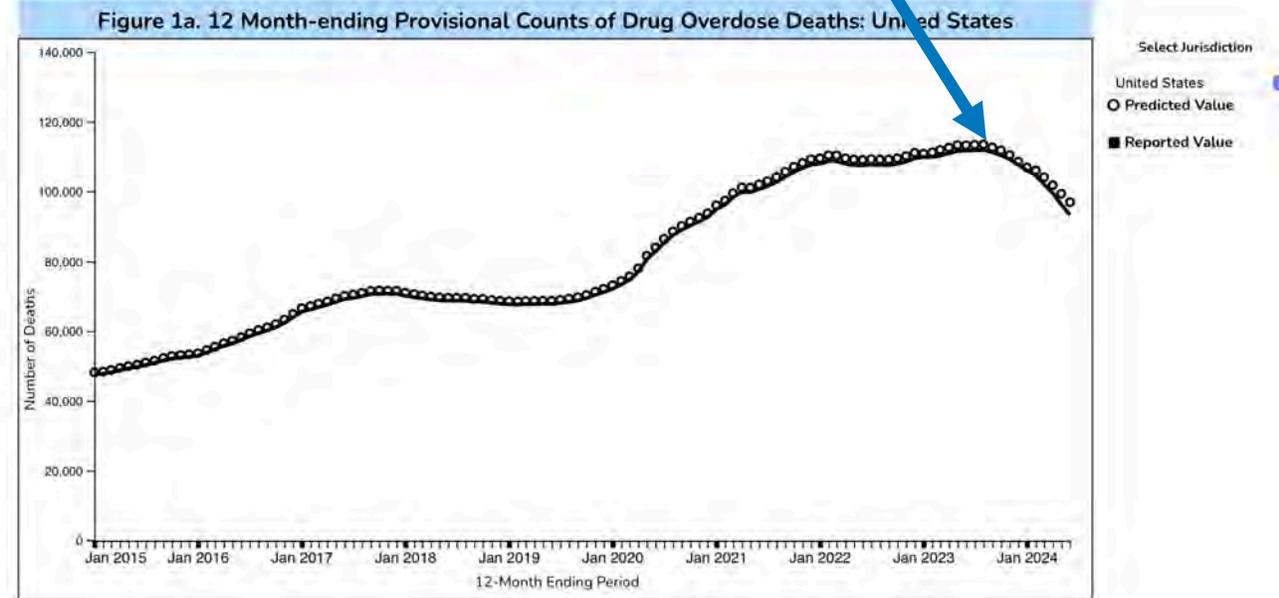


# Counts Peaked in Q3 2023



## 12 Month-ending Provisional Number and Percent Change of Drug Overdose Deaths

Based on data available for analysis on: November 3, 2024



<https://www.srtr.org/tools/donation-and-transplant-system-explorer/>

<https://www.cdc.gov/nchs/nvss/vsrr/drug-overdose-data.htm>

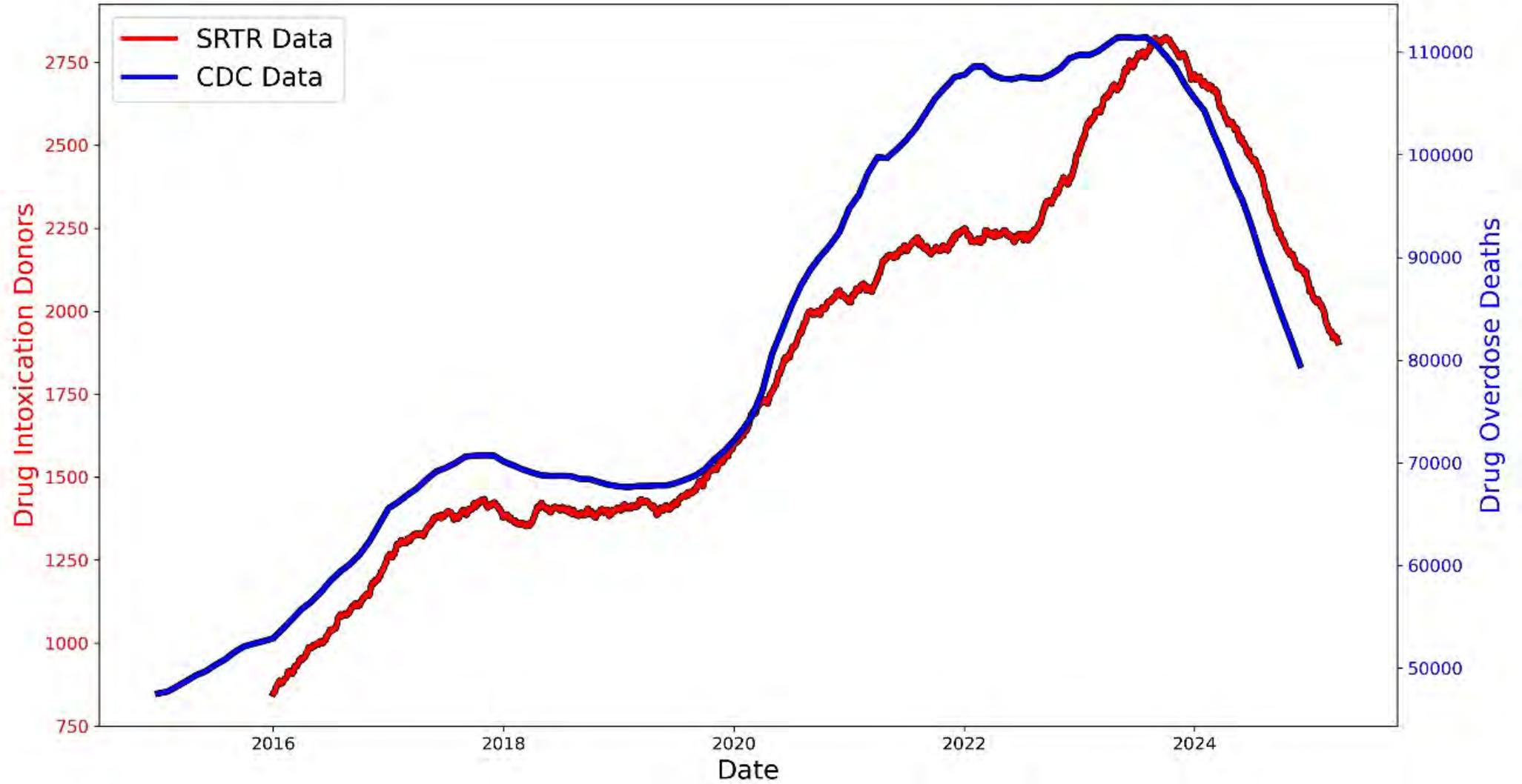
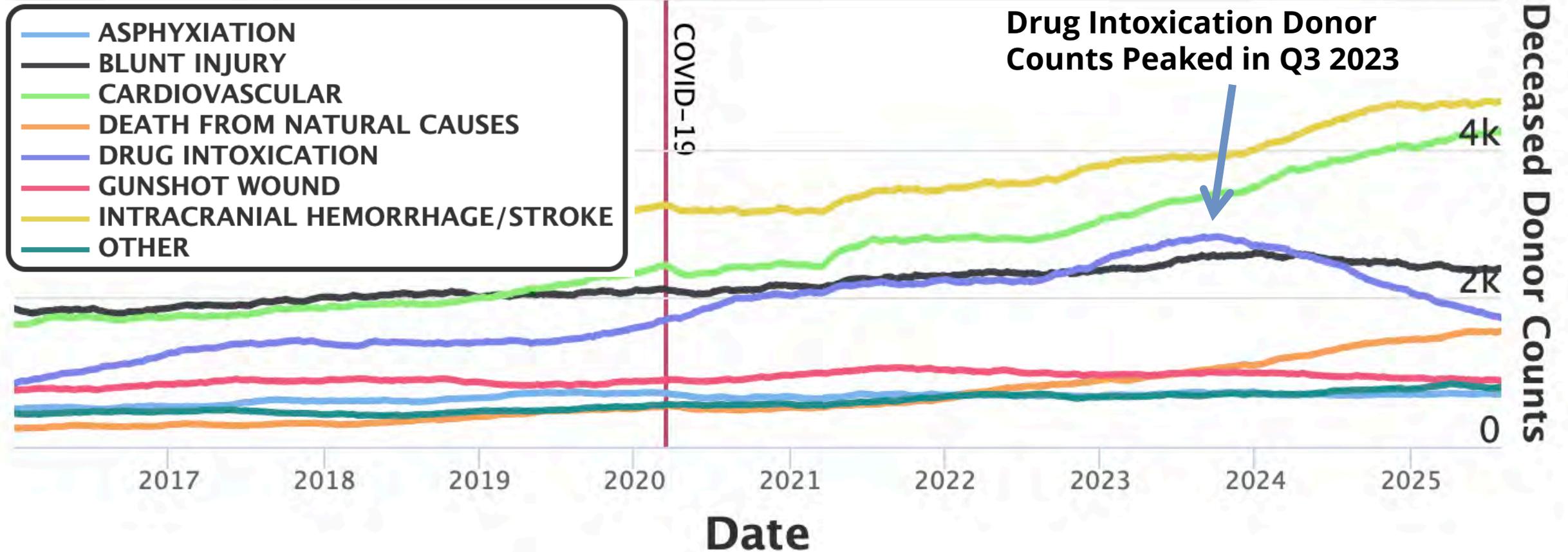


Figure courtesy of Nick Wood, PhD

# Deceased Donor Counts

Zoom 1m 3m 6m YTD 1y All

Jan 2, 2016 → Jul 31, 2025

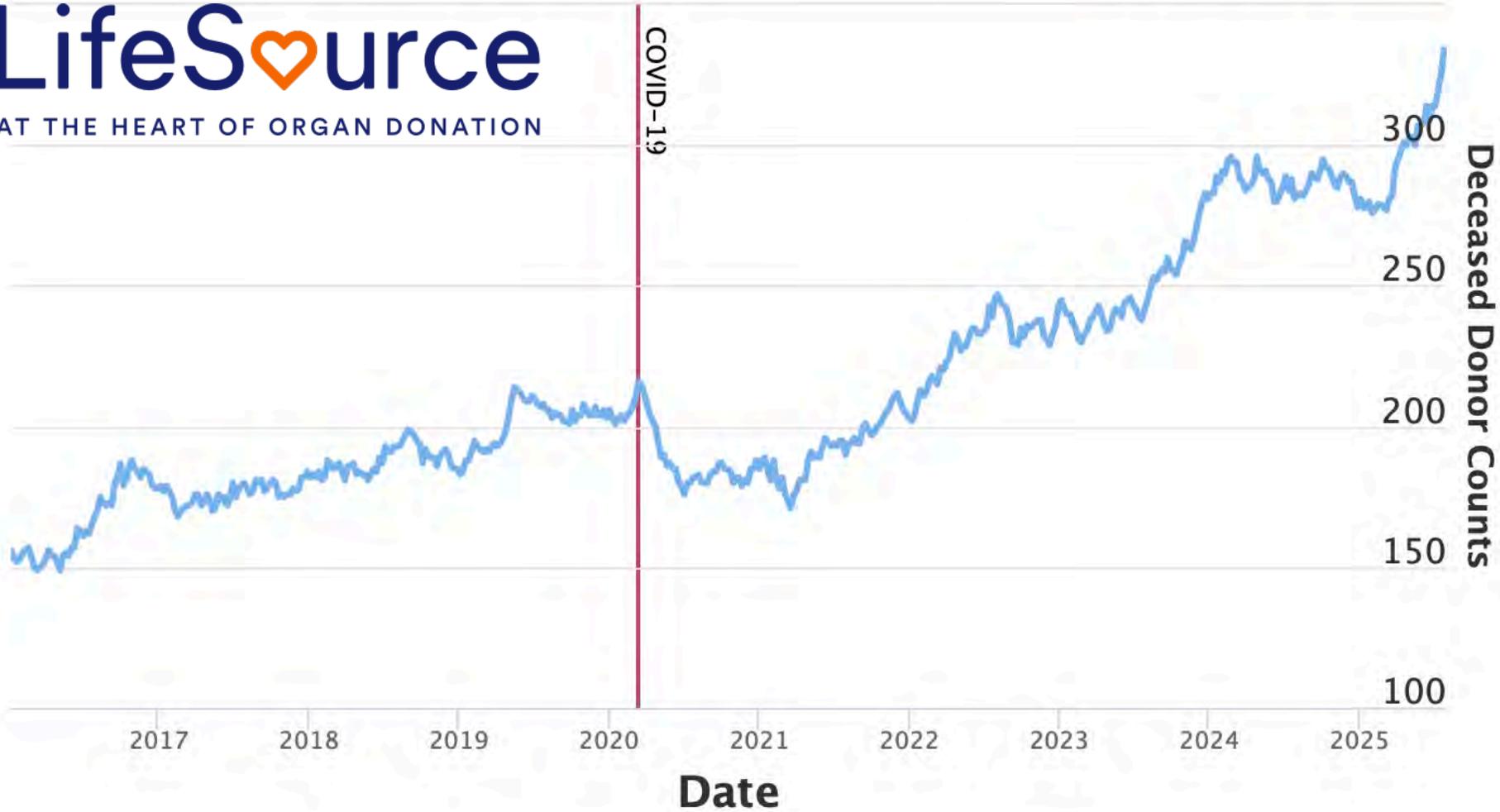


# Deceased Donor Counts



Zoom 1m 3m 6m YTD 1y All

Jan 7, 2016 → Jul 31, 2025



**333**  
Annualized  
as of  
7/31/2025

# Deceased Donor Counts

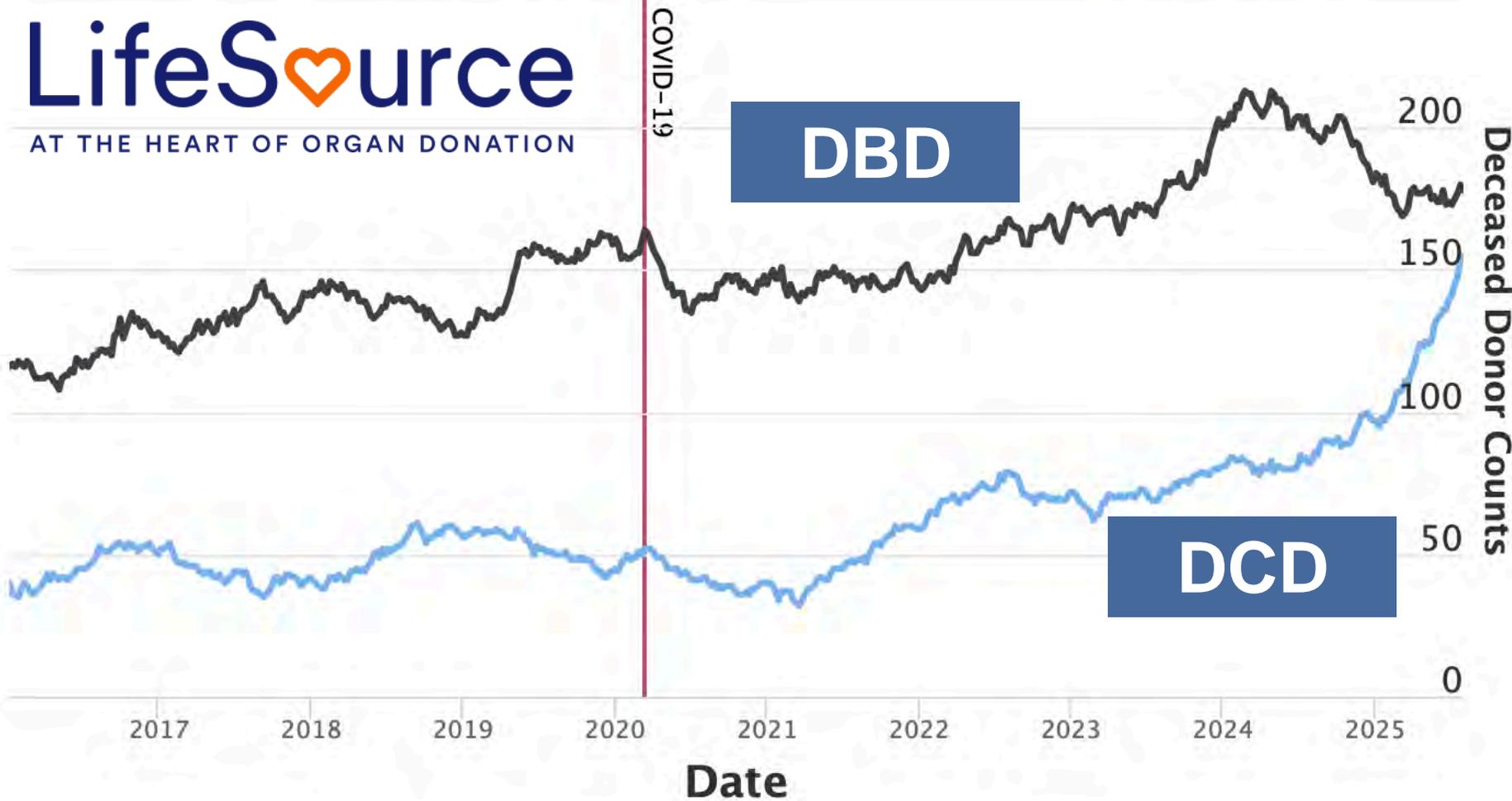


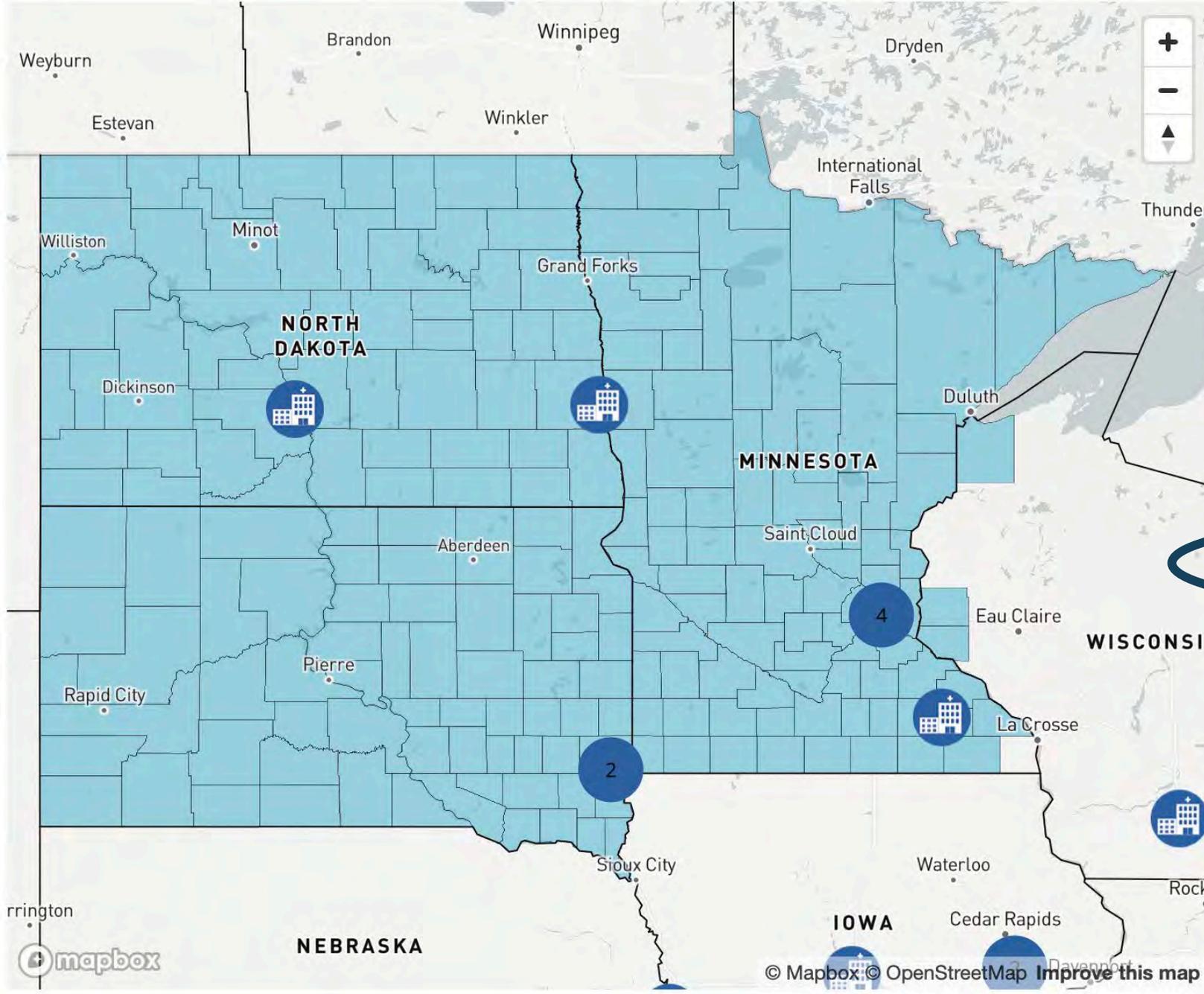
Zoom 1m 3m 6m YTD 1y All

Jan 7, 2016 → Jul 31, 2025

## LifeSource

AT THE HEART OF ORGAN DONATION





# LifeSource

AT THE HEART OF ORGAN DONATION

Population Served: 7,474,976

Population Density: 33 persons/mi<sup>2</sup>

Population Rank: 15 among the 55 DSAs

Land Area Served: 226,487 square miles

Land Area Rank: 2 among the 55 DSAs

Deaths: 62,774

Deaths per 1,000: 8.40

Deaths Rank: 19 among the 55 DSAs



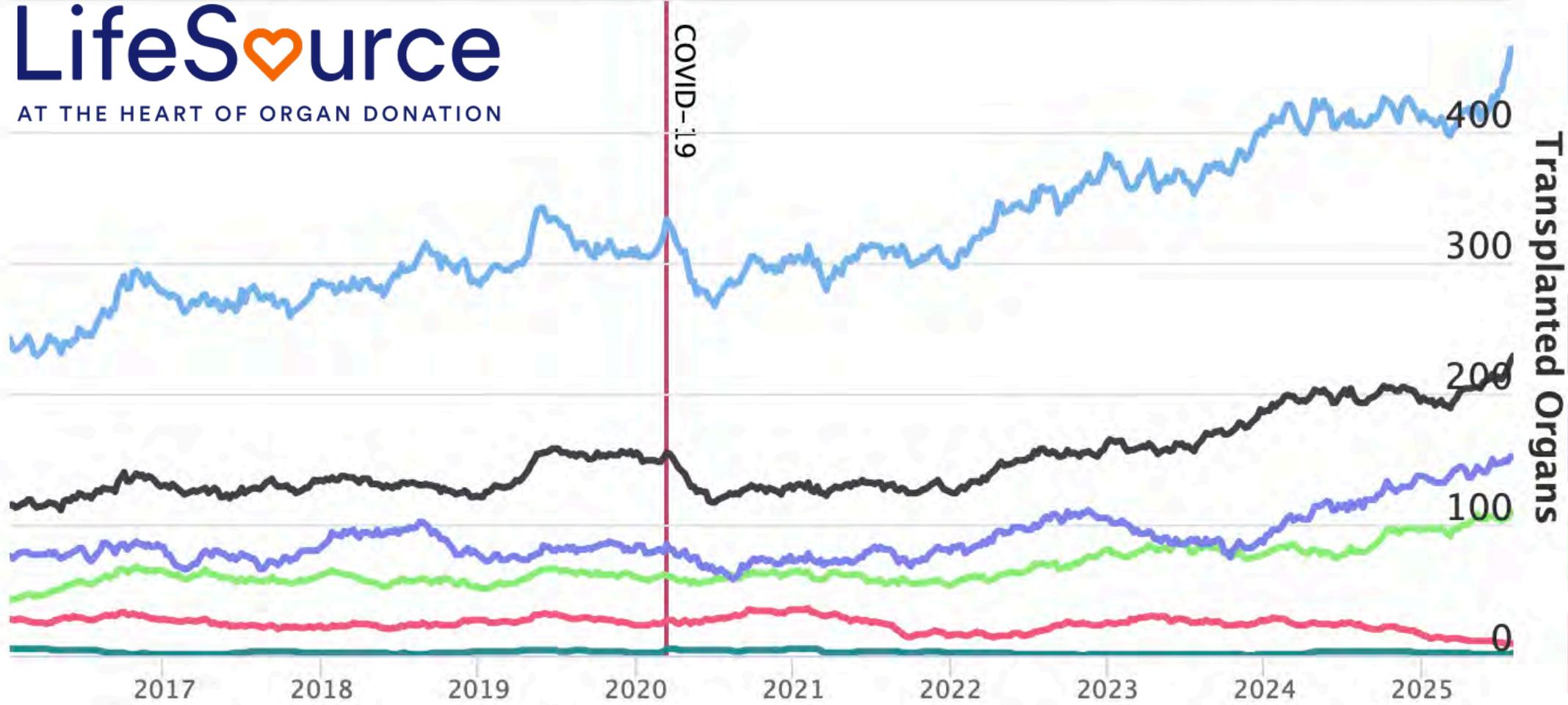
# Transplanted Organs



Zoom 1m 3m 6m YTD 1y **All**

Jan 7, 2016 → Jul 31, 2025

**LifeSource**  
AT THE HEART OF ORGAN DONATION



**KI: 464**

**LI: 229**

**LU: 152**

**HR: 109**

**PA: 9**

# Transport Distance



Zoom 1m 3m 6m YTD 1y **All**

Jan 7, 2016 → Jul 31, 2025



COVID-19



Median Transport Distance (NM)

**LU: 575**

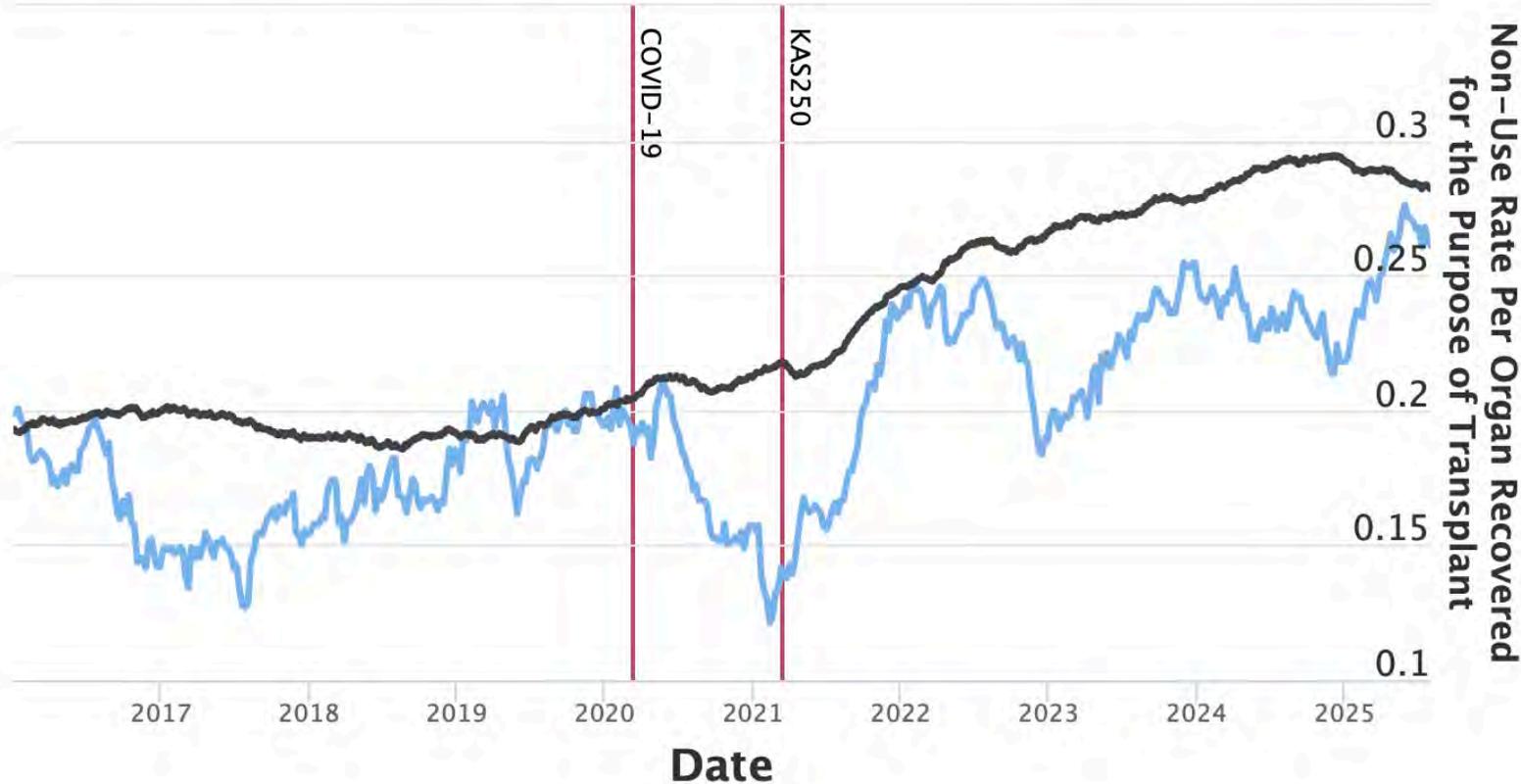
**HR: 385**

**KI: 174**

**LI: 173**

# Non-Use Rate

Zoom 1m 3m 6m YTD 1y All Jan 2, 2016 → Jul 31, 2025

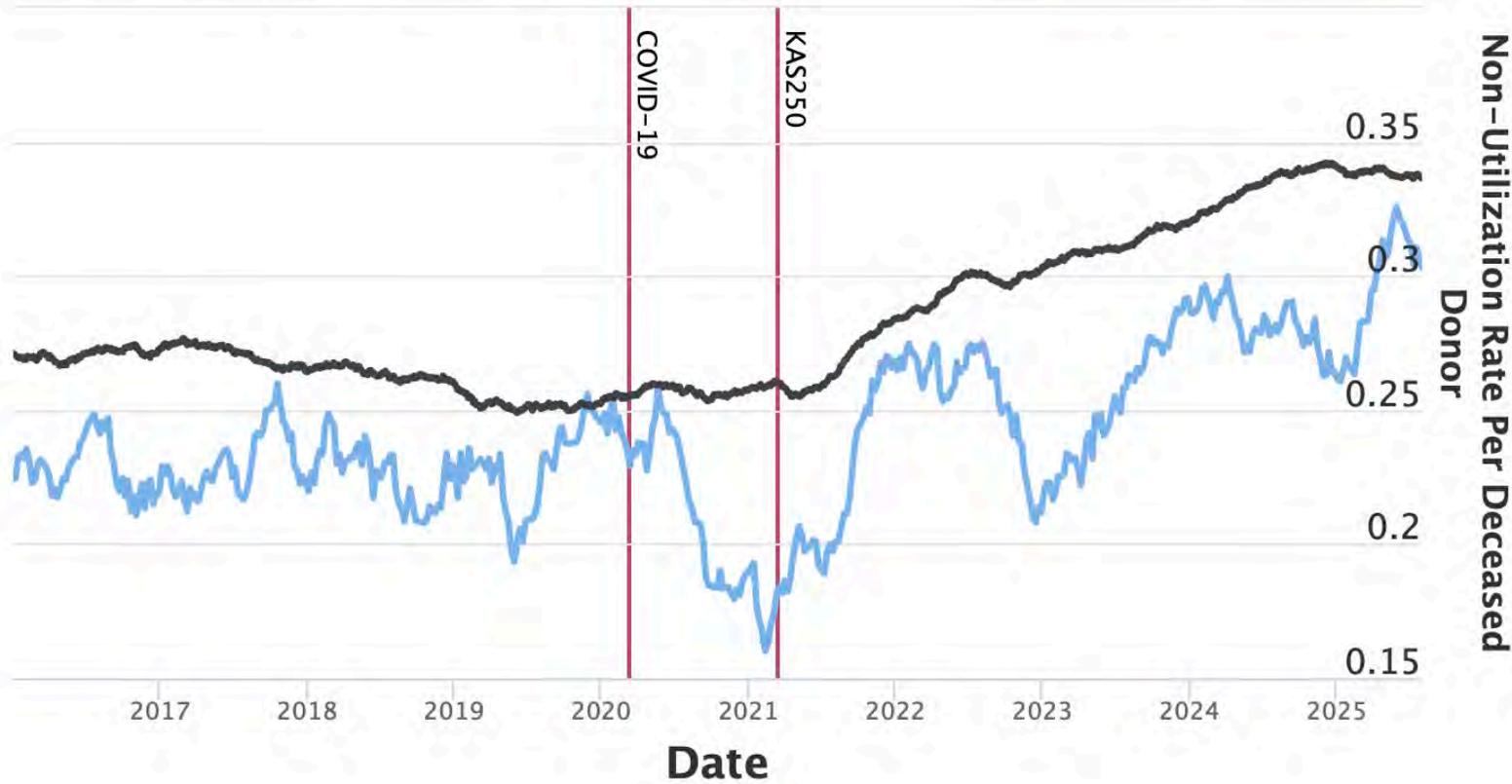


**Kidney Non-Use:**  
**LifeSource: 26%**  
**National: 28%**



# Non-Utilization Rate

Zoom 1m 3m 6m YTD 1y All Jan 2, 2016 → Jul 31, 2025



**Kidney Non-Utilization:**

**LifeSource: 30%**  
**National: 34%**

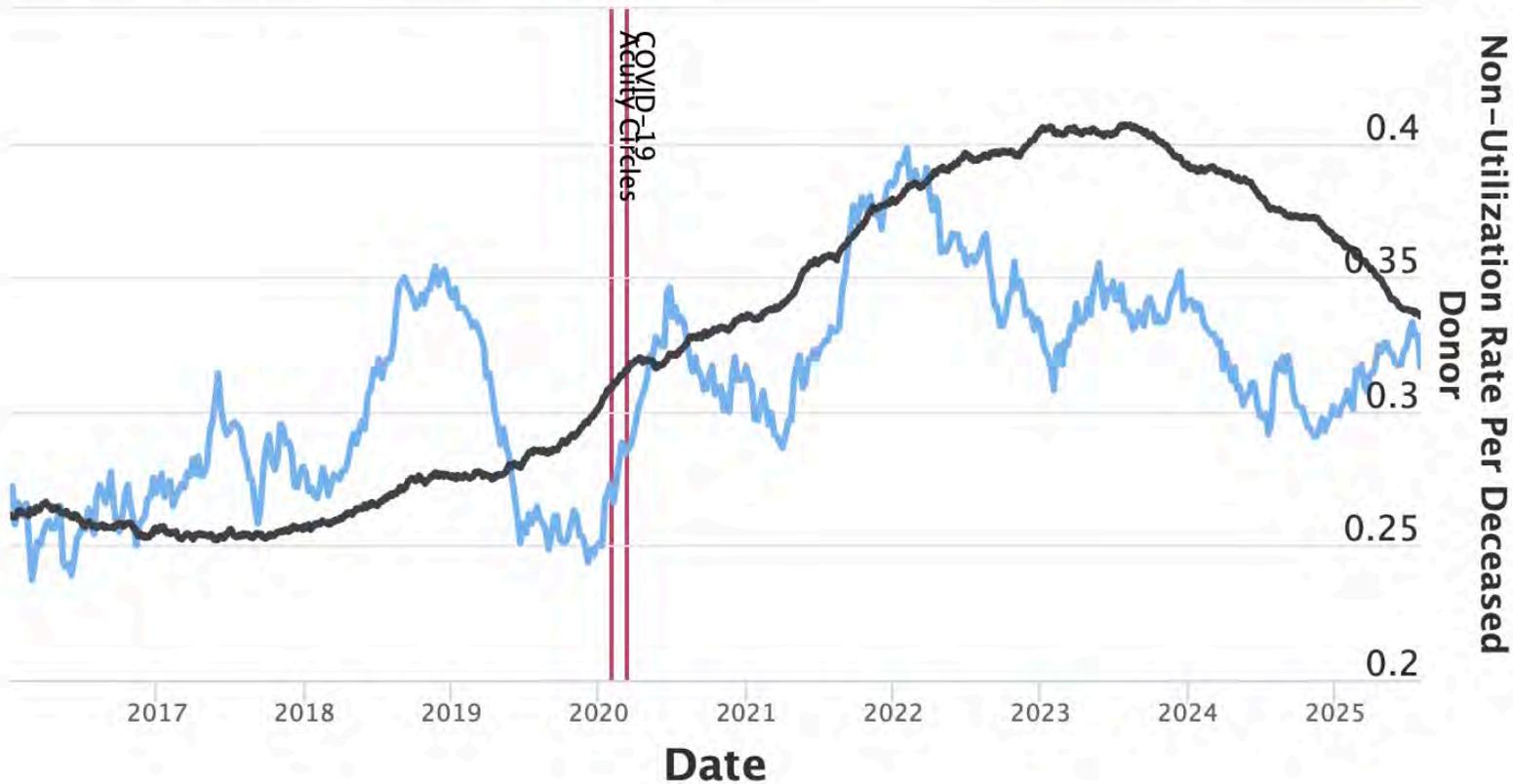


— LifeSource Upper Midwest Organ Procurement Organization (MNOP)  
— National

# Non-Utilization Rate

Zoom 1m 3m 6m YTD 1y All

Jan 2, 2016 → Jul 31, 2025



**Liver Non-Utilization:**

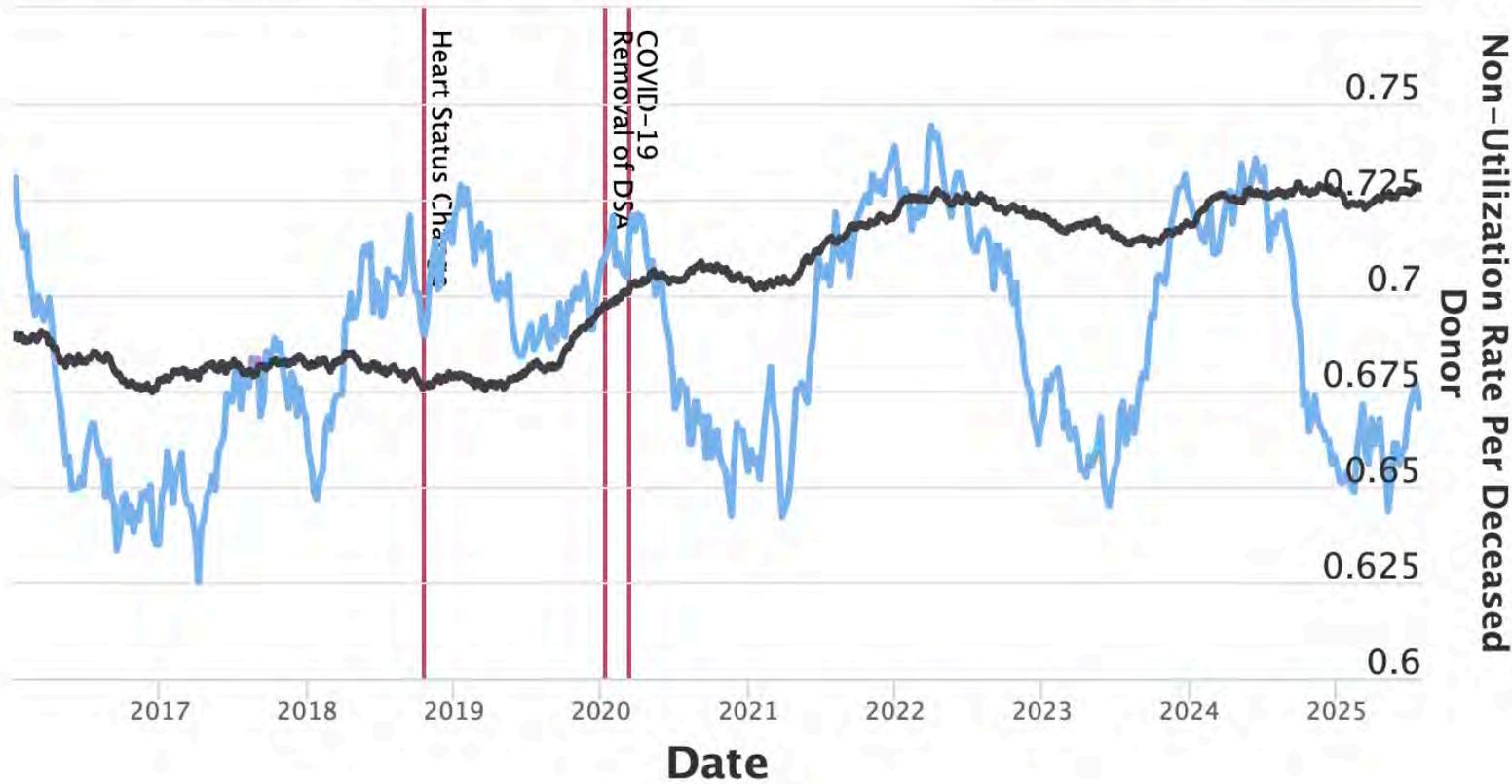
**LifeSource: 32%**

**National: 34%**

— LifeSource Upper Midwest Organ Procurement Organization (MNOP)  
 — National

# Non-Utilization Rate

Zoom 1m 3m 6m YTD 1y All Jan 2, 2016 → Jul 31, 2025



— LifeSource Upper Midwest Organ Procurement Organization (MNOP)  
— National

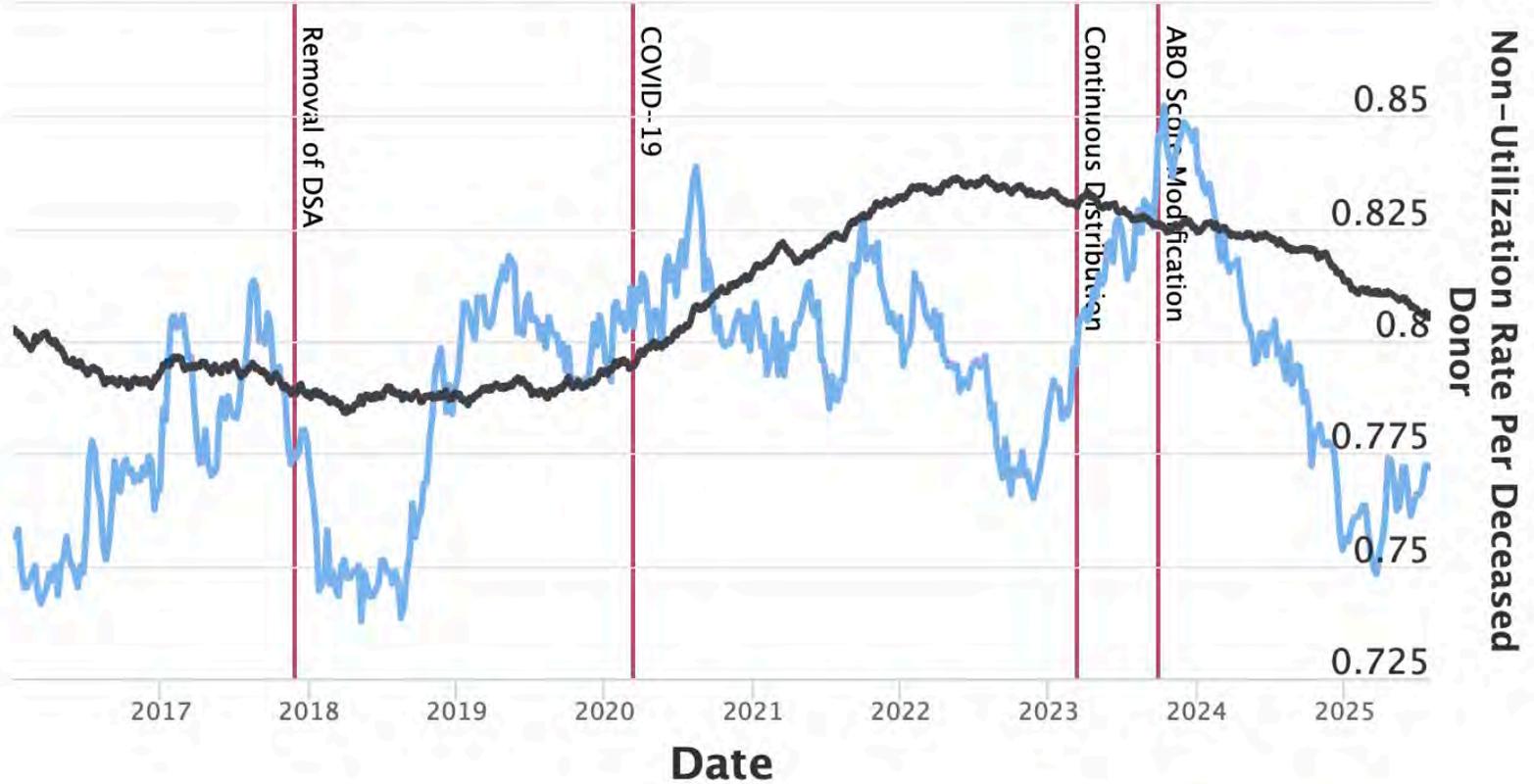
**Heart Non-Utilization:**

**LifeSource: 67%**  
**National: 73%**

# Non-Utilization Rate



Zoom 1m 3m 6m YTD 1y **All** Jan 2, 2016 → Jul 31, 2025



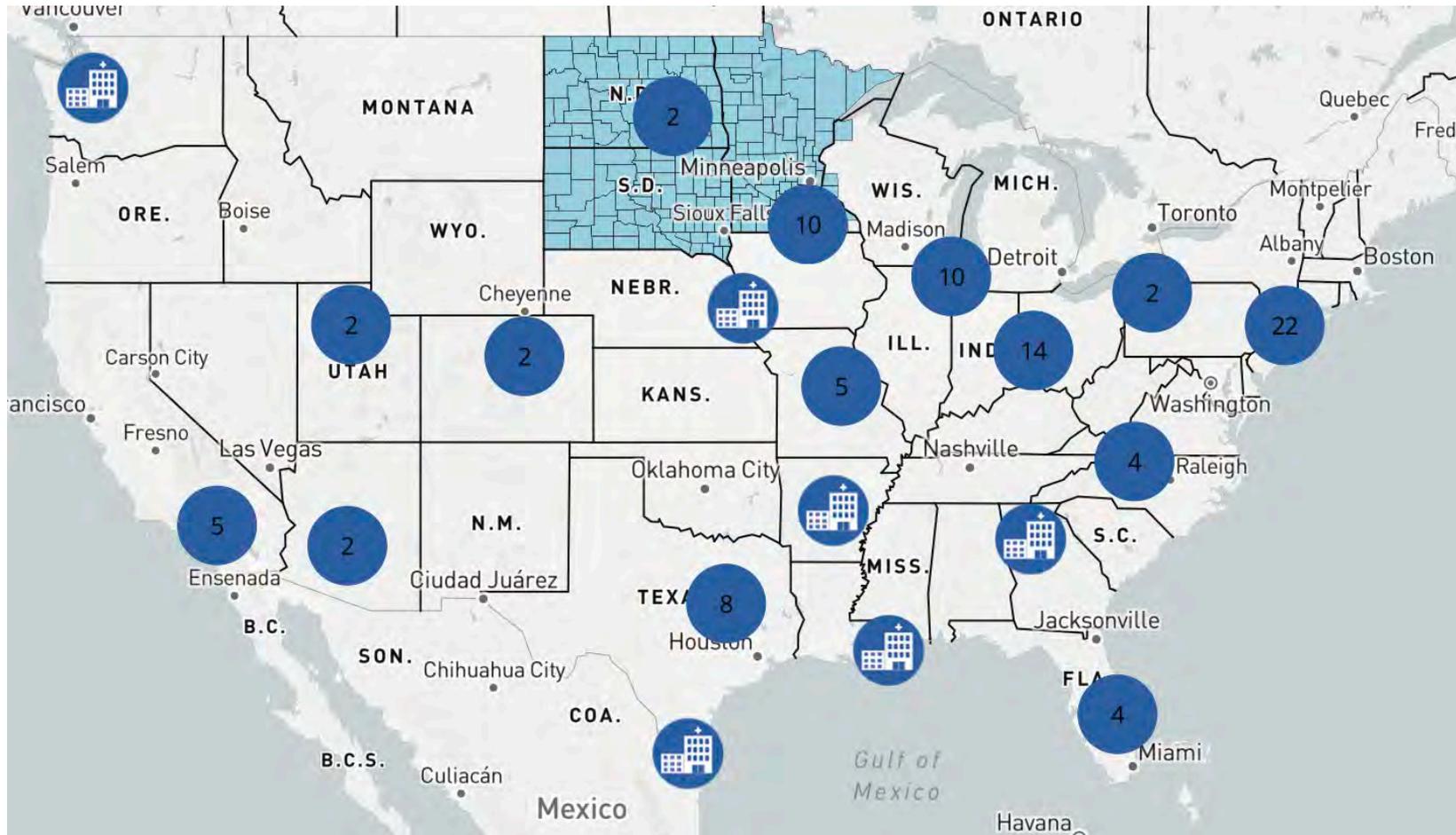
**Lung Non-Utilization:**  
**LifeSource: 77%**  
**National: 81%**



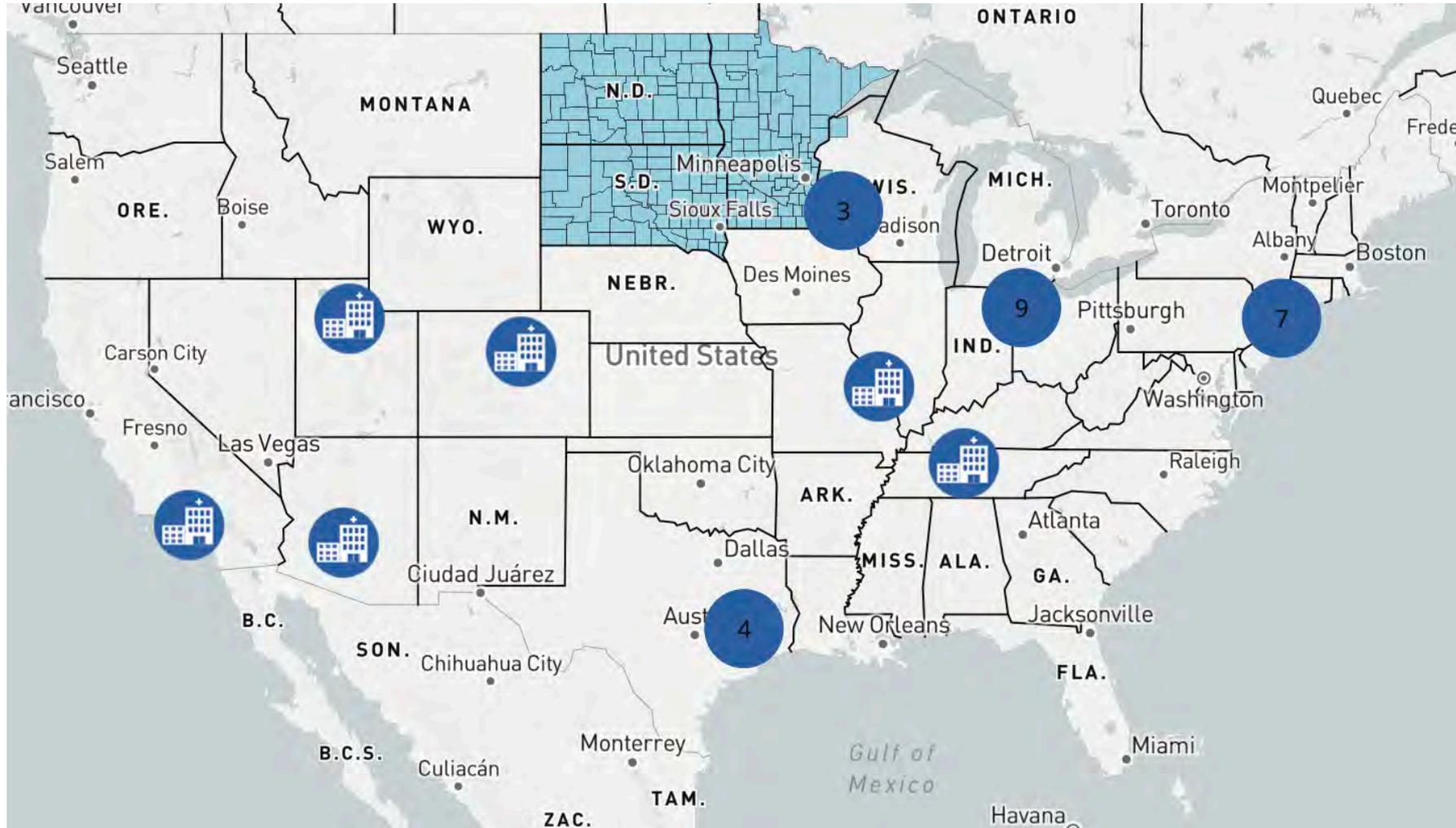
— LifeSource Upper Midwest Organ Procurement Organization (MNOP)  
 — National



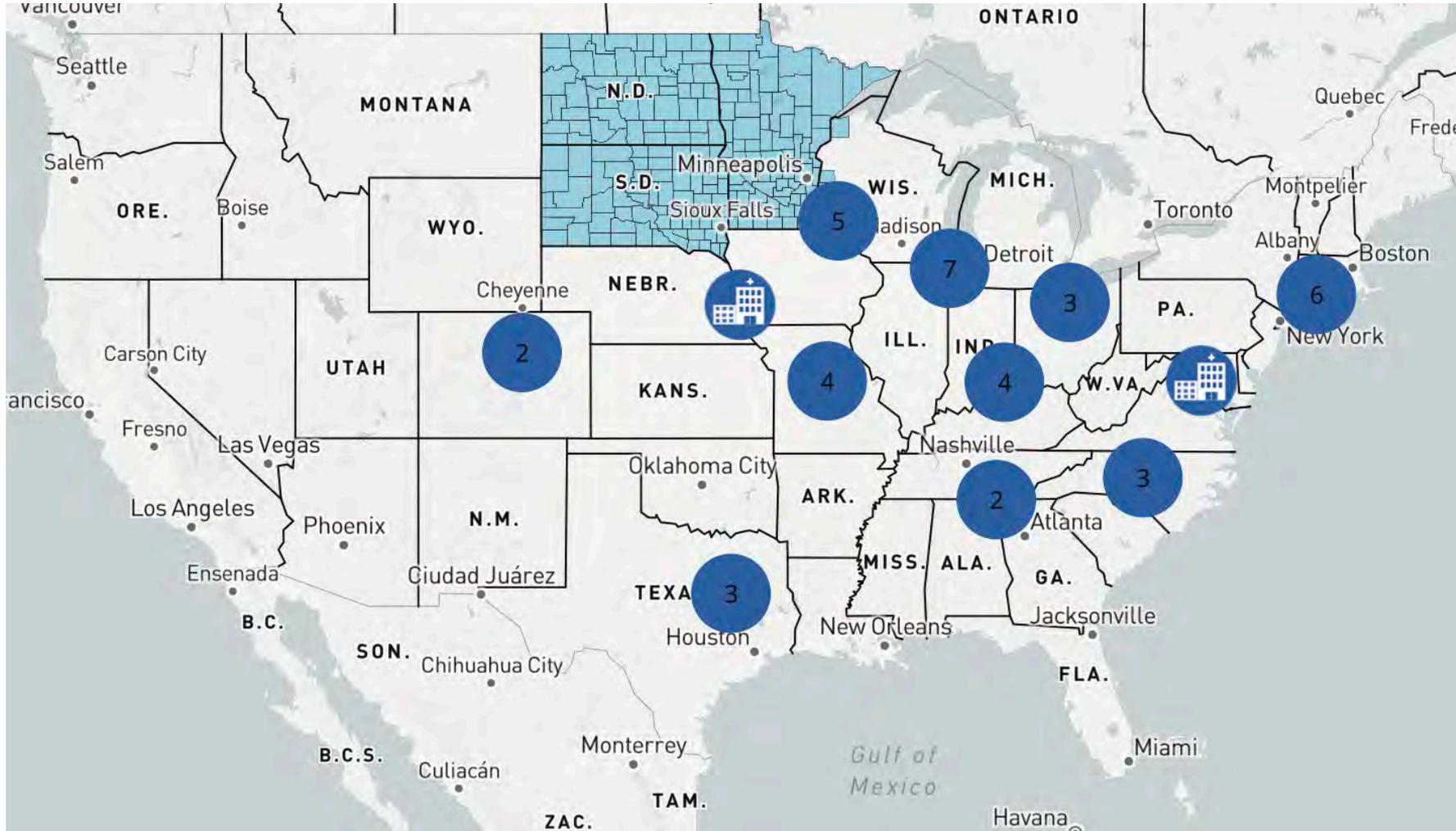
# Programs Receiving Organs from LifeSource



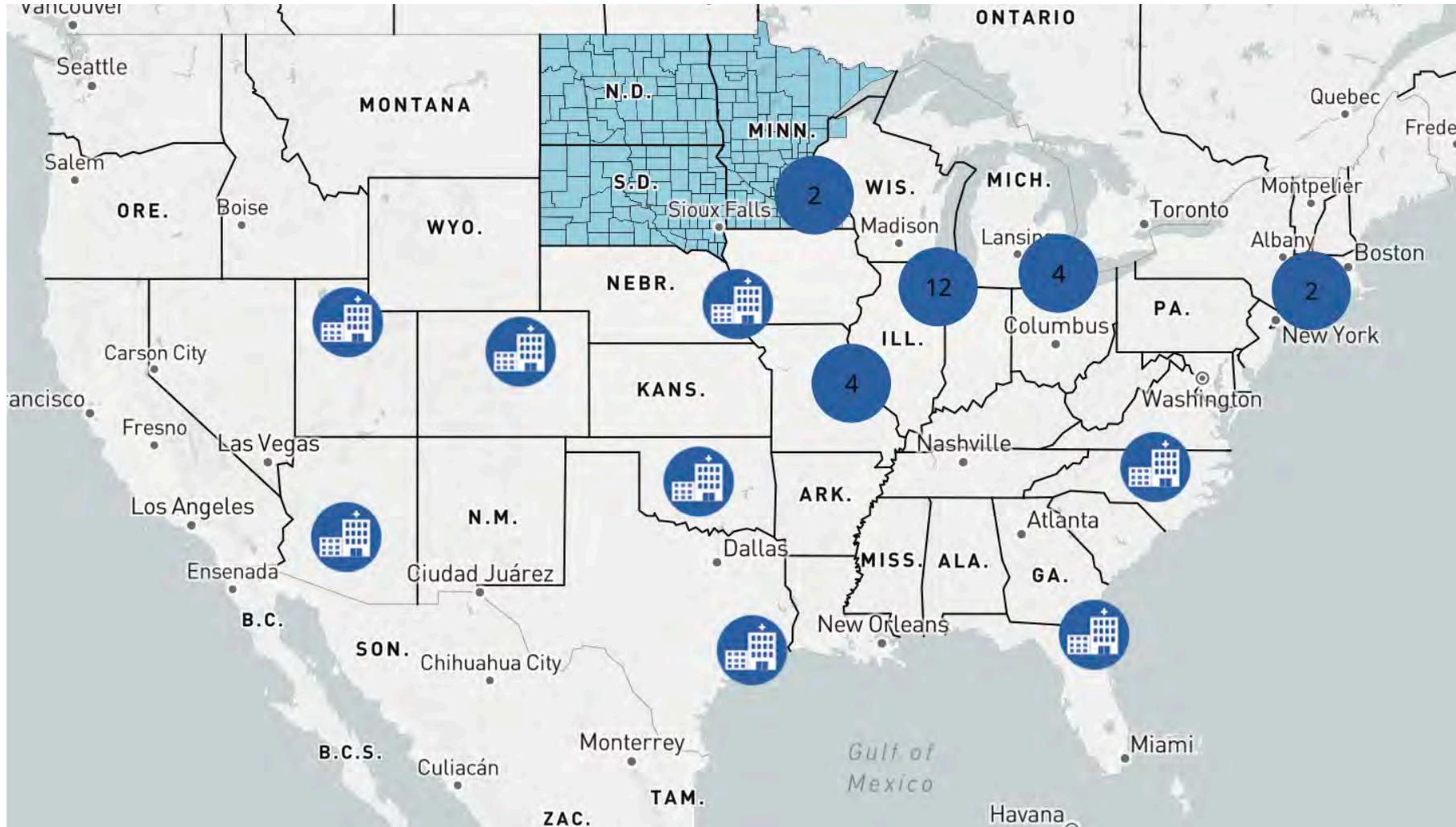
# Programs Receiving Lungs from LifeSource



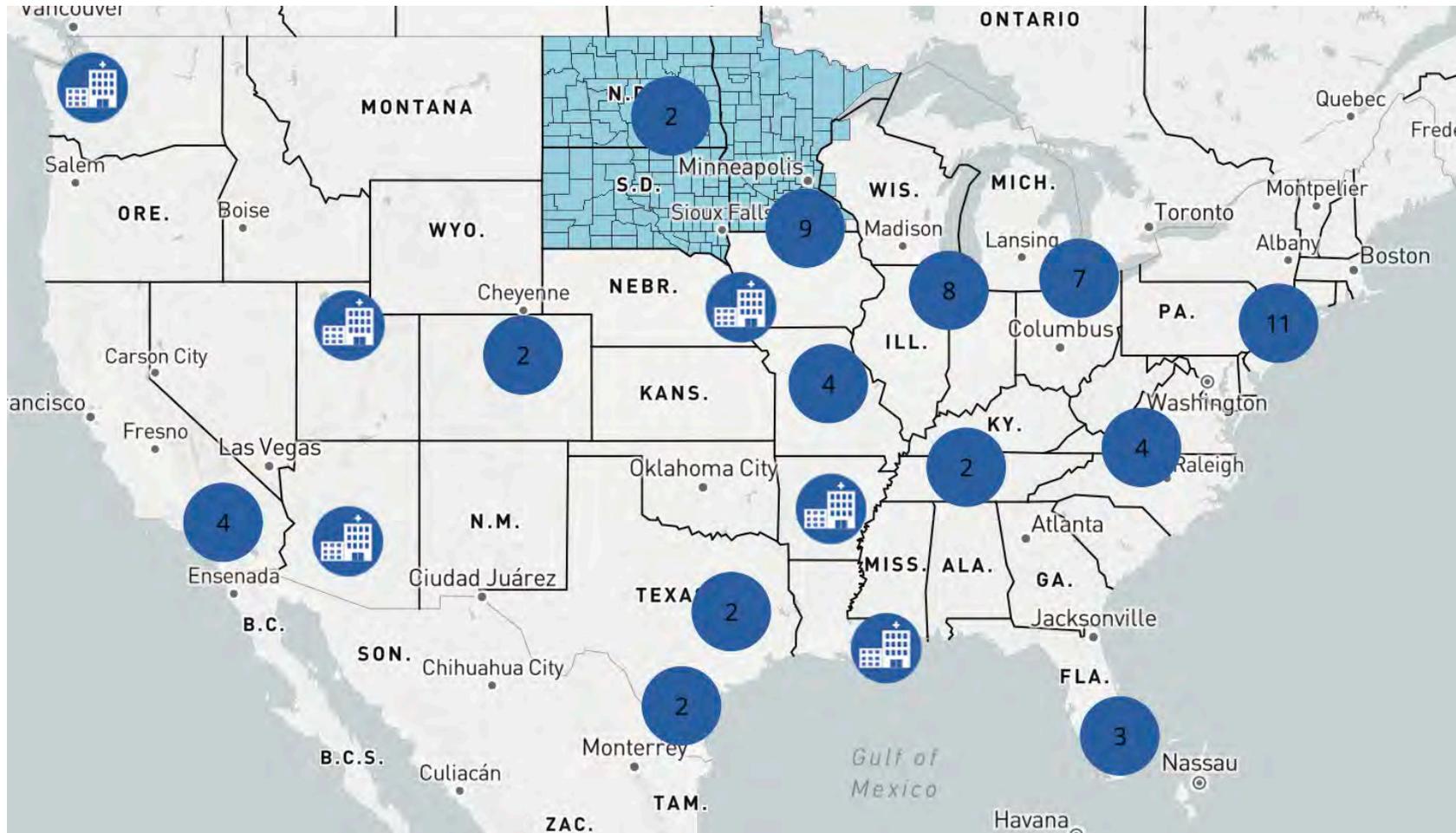
# Programs Receiving Hearts from LifeSource



# Programs Receiving Livers from LifeSource

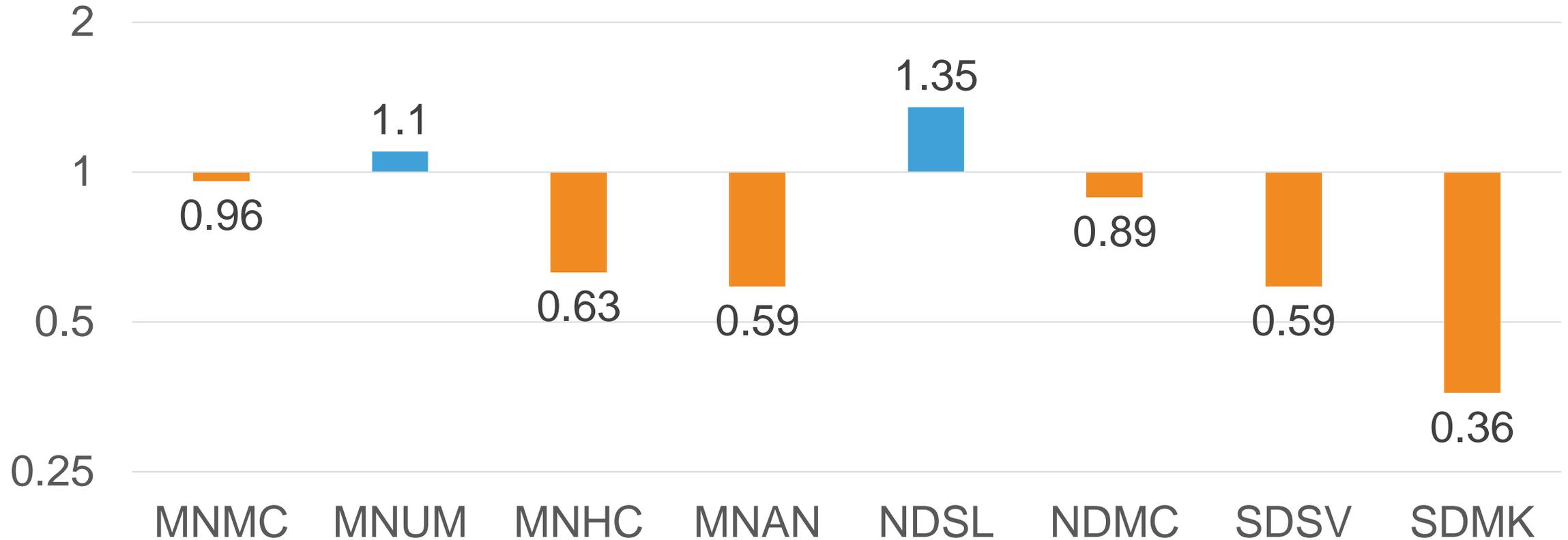


# Programs Receiving Kidneys from LifeSource



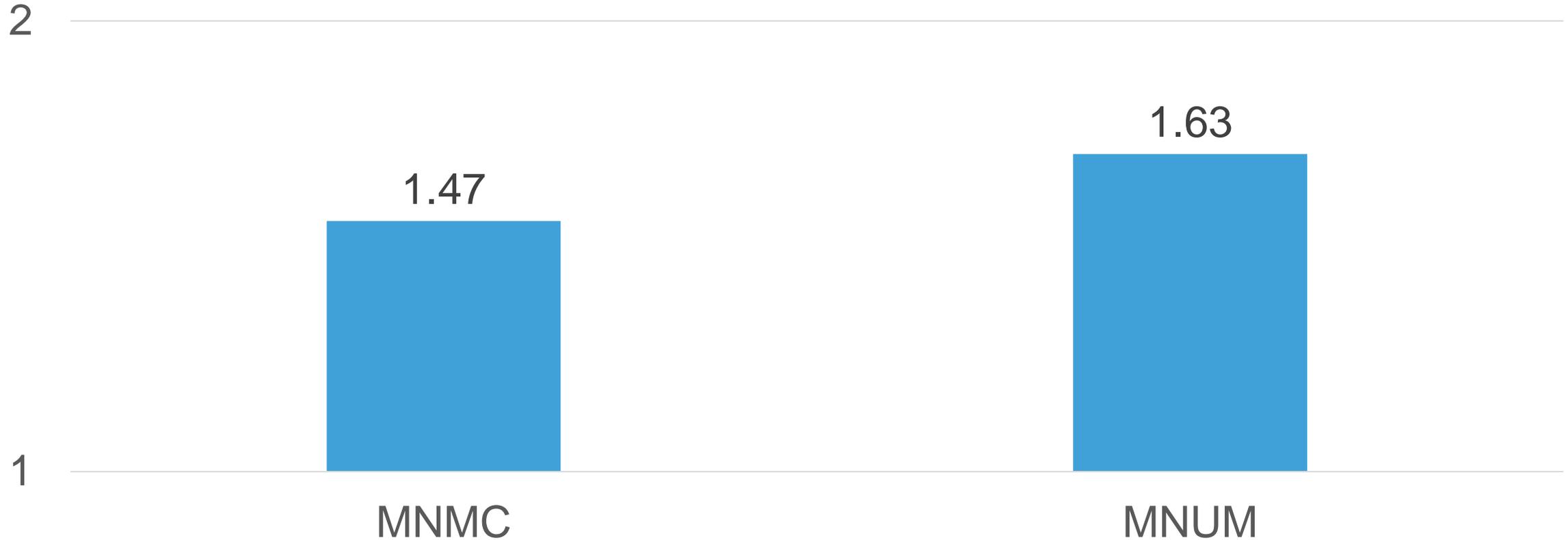
# Local Offer Acceptance

# Local Kidney Offer Acceptance Rate Ratios

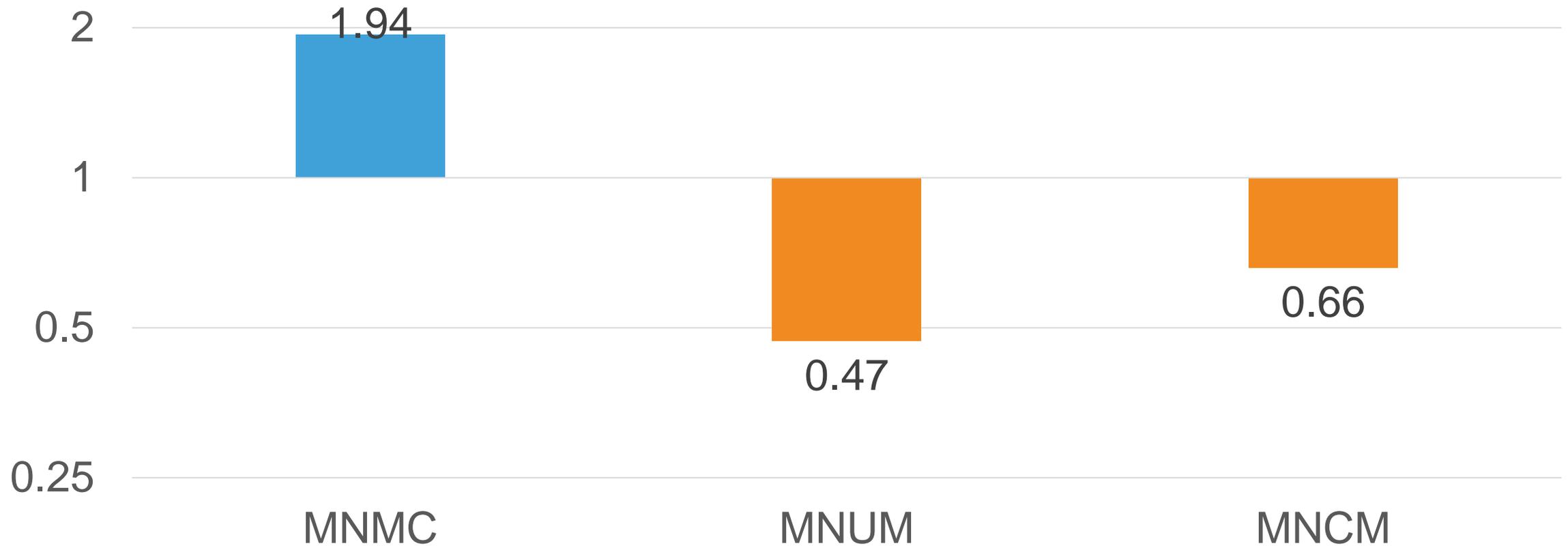


Source: SRTR 2025.07 Program-Specific Reports

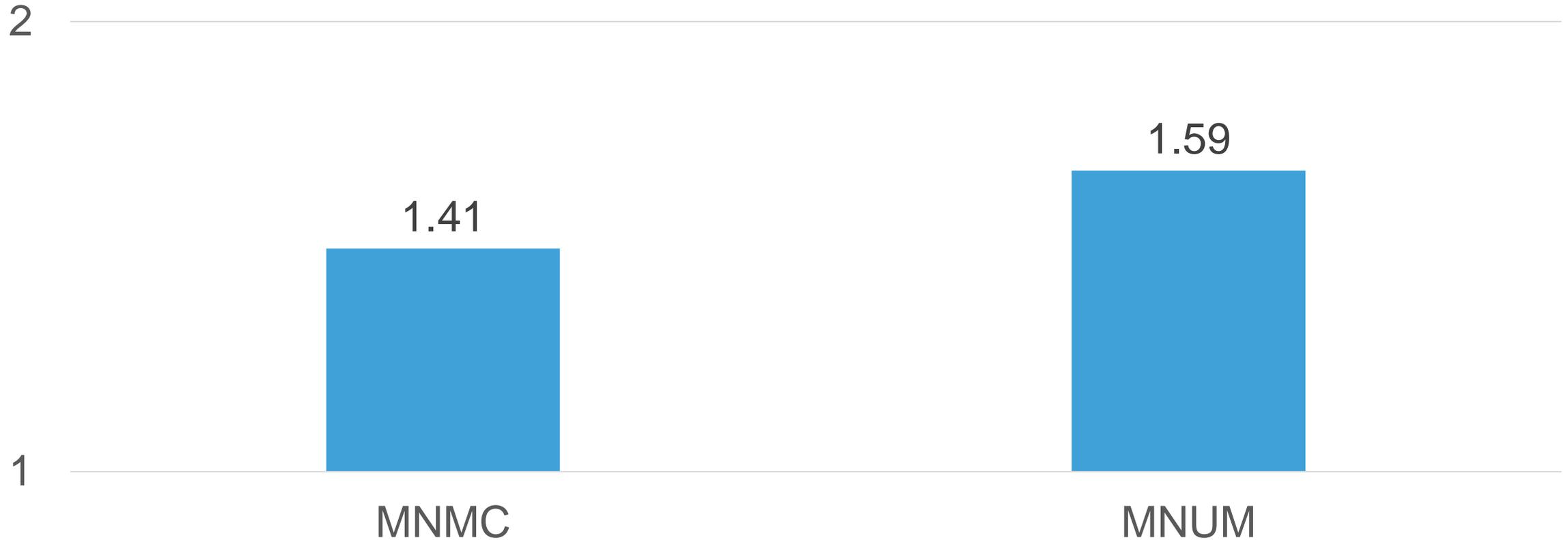
# Local Liver Offer Acceptance Rate Ratios



# Local Heart Offer Acceptance Rate Ratios



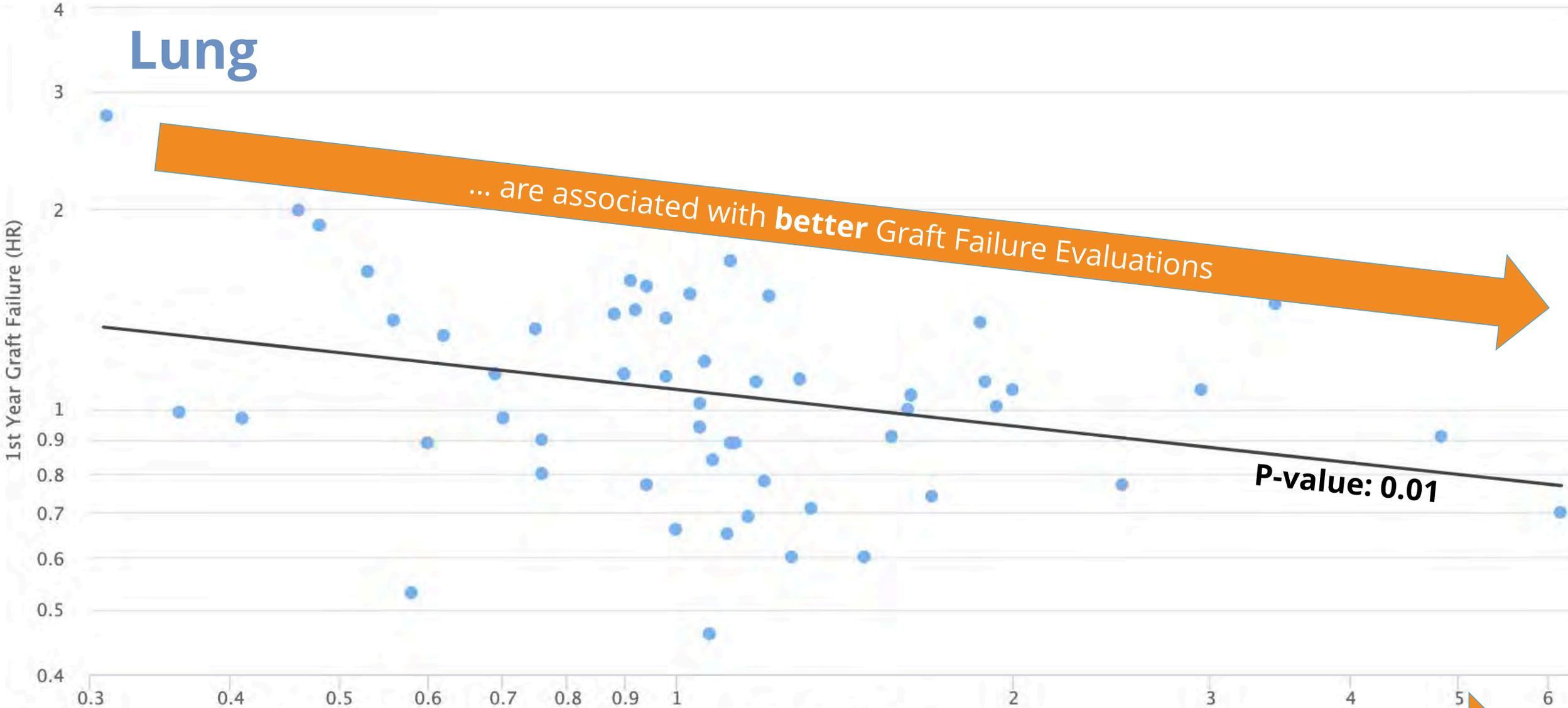
# Local Lung Offer Acceptance Rate Ratios



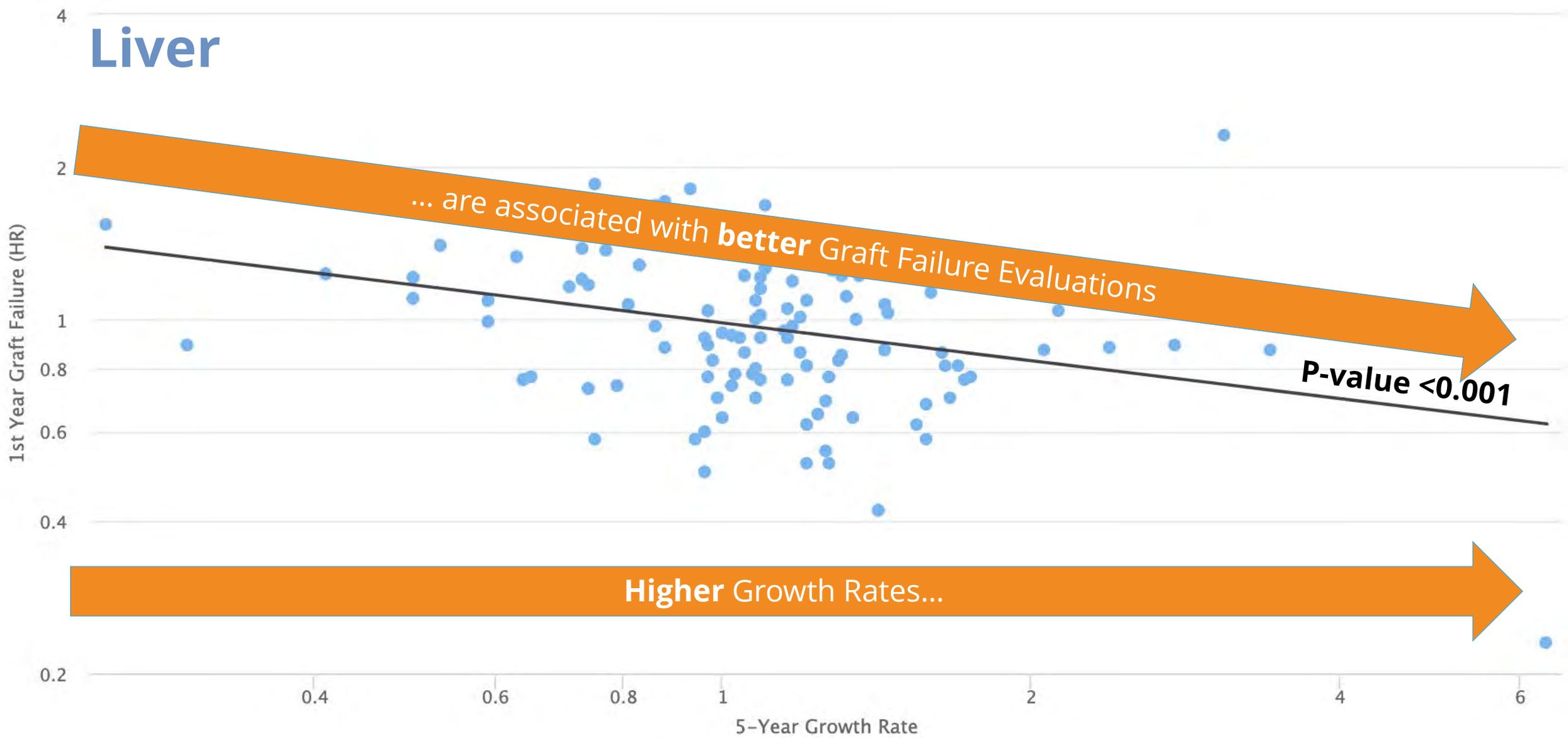


# Does Growth Jeopardize My Program's Outcomes?

# Lung



# Liver



# Kidney

1st Year Graft Failure (HR)

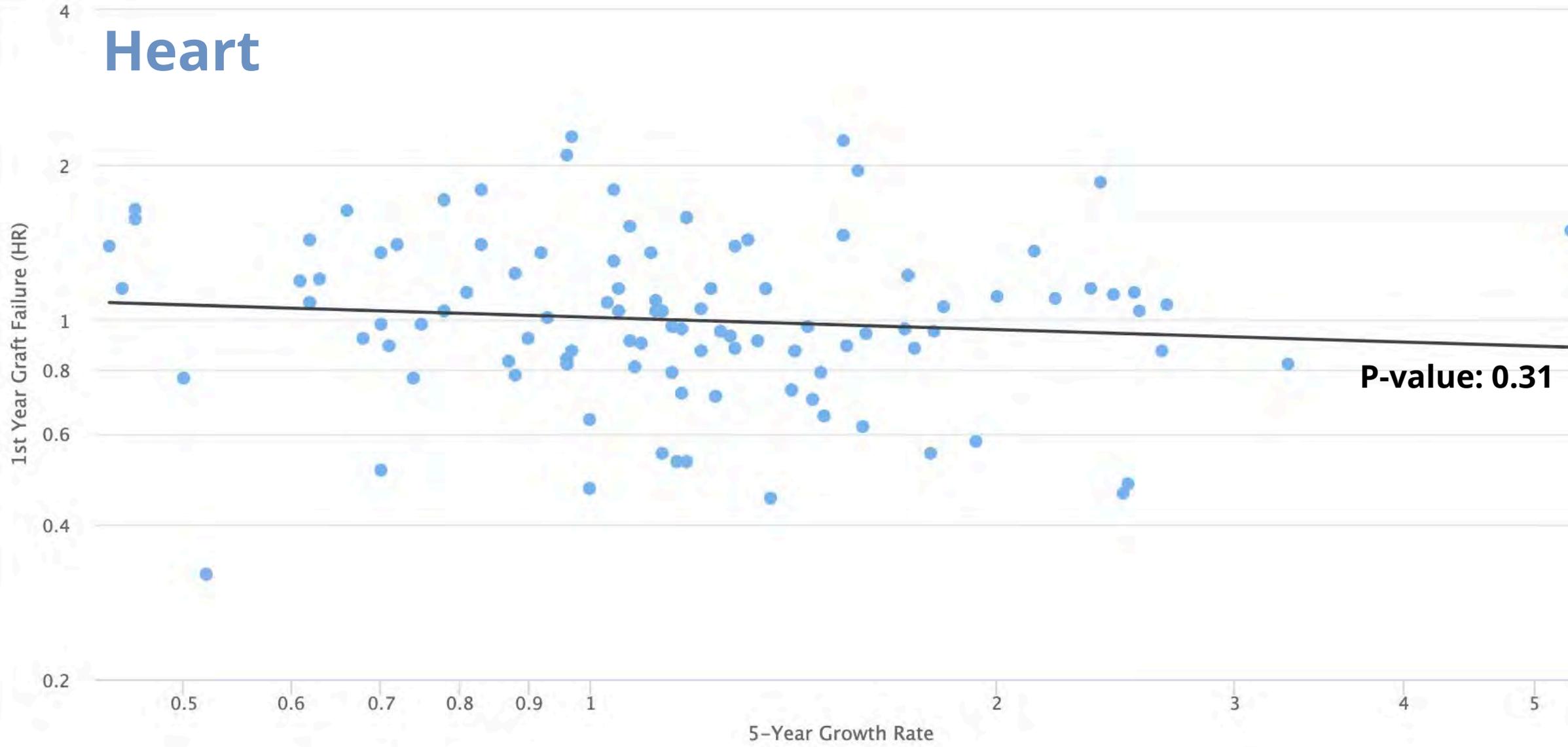
**P-value <0.001**

... are associated with **better** Graft Failure Evaluations

**Higher Growth Rates...**

5-Year Growth Rate

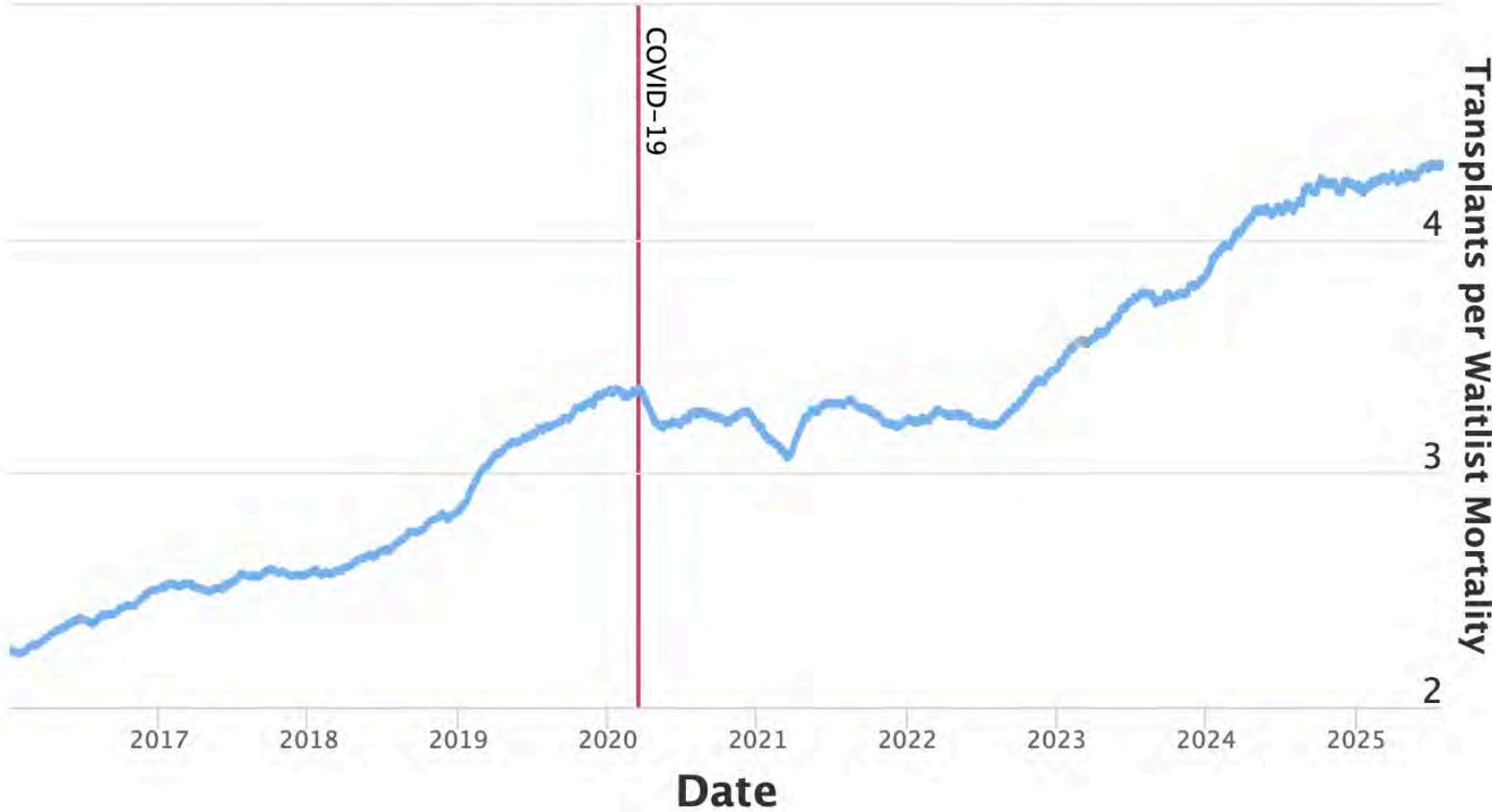
# Heart



# Transplants per Waitlist Mortality

Zoom 1m 3m 6m YTD 1y All

Jan 2, 2016 → Aug 2, 2025



We continue to do more transplants relative to people dying or becoming too sick to transplant.





# Growth in the Donation and Transplant System

**Jon Snyder, PhD**

Director of Transplant Epidemiology  
Chronic Disease Research Group  
Hennepin Healthcare Research Institute





# Regional Opportunities

---

Kevin Cmunt

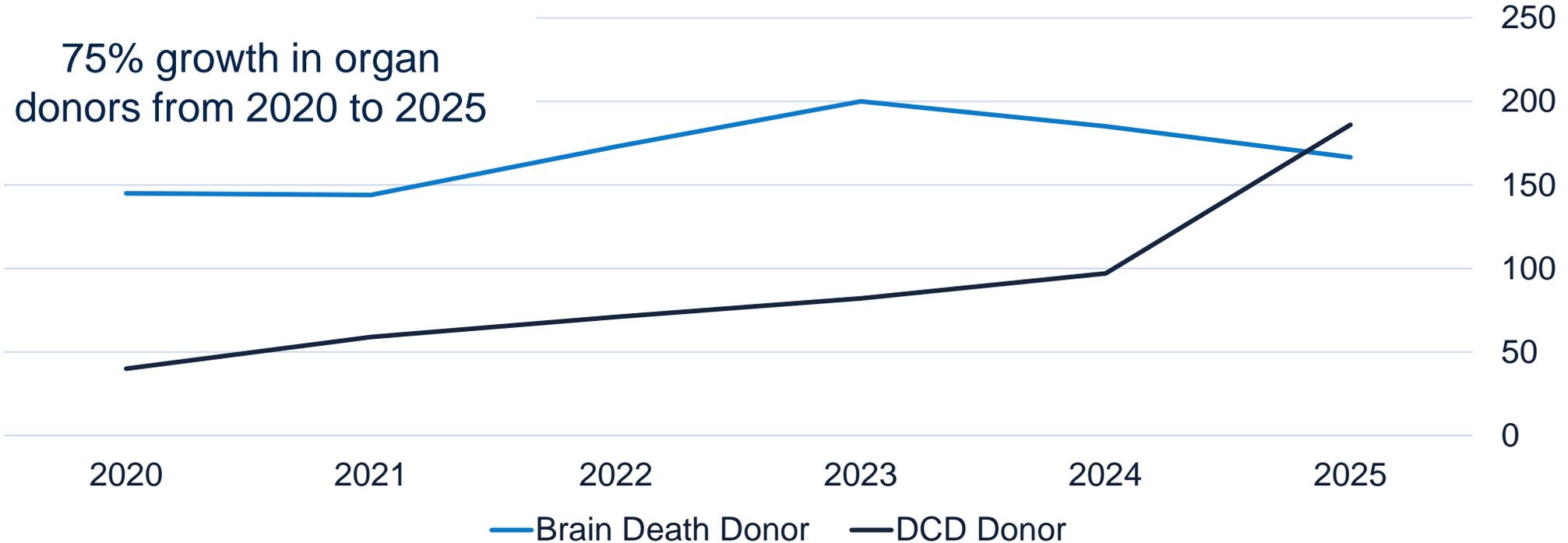
**Patients +  
Organs +  
Transplant Resources =  
GROWTH**



# Recent regional donation growth has been in DCD donors



### BD vs. DCD Donor Volumes in MNOP DSA



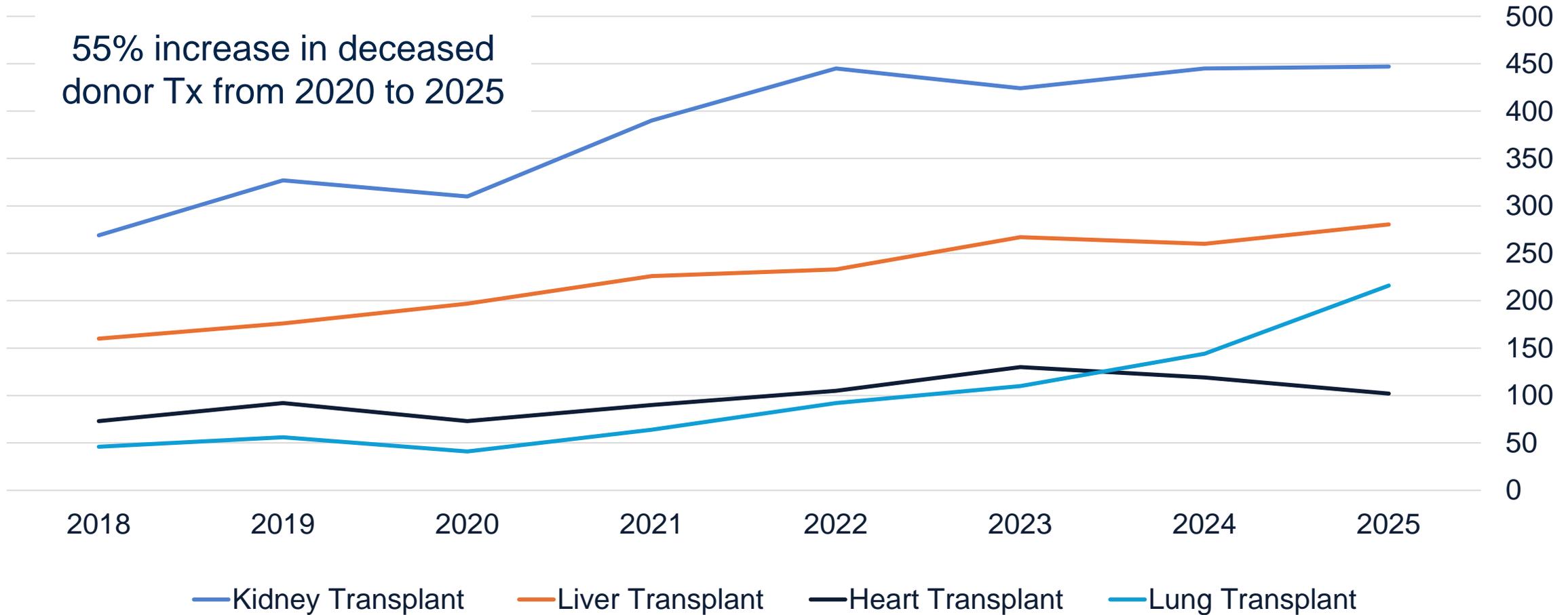
Based on OPTN data as of 9/16/2025. 2025 numbers annualized as of 8/31/2025.

# Recent regional deceased donor transplant growth has been in lungs



## Transplants by Organ Type in MNOP DSA

55% increase in deceased donor Tx from 2020 to 2025



Based on OPTN data as of 9/16/2025. 2025 numbers annualized as of 8/31/2025.

# Patients in need in MN, ND, & SD

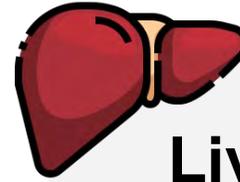
# Regional abdominal transplant needs

LifeSource DSA



## Kidney Transplant Needs

- Dialysis patients: 7,400<sup>†</sup>
- 2024 deceased donor kidney Tx: 420\*



## Liver Transplant Needs

- Deaths from liver failure: > 1,100 per year\*\*
- 2024 deceased donor liver Tx: 260\*

*South Dakota has the second highest liver disease mortality rate in the country*

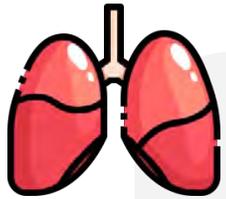
<sup>†</sup>Based on [USRDS data](#) as of May 2025

\*Based on OPTN data as of 9/16/2025

\*\*Based on [CDC data](#) as of August 2025

# Regional thoracic transplant needs

LifeSource DSA



## Lung Transplant Needs

- Deaths from interstitial lung disease: 500 per year<sup>†</sup>
- 2024 lung Tx: 144\*



## Heart Transplant Needs

- Deaths from heart disease: 10k per year\*\*
- 2024 heart Tx: 119\*

<sup>†</sup>Based on [NIH data](#) as of Jan. 2022

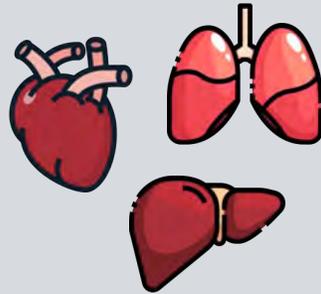
\*Based on OPTN data as of 9/16/2025

\*\*Based on [CDC data](#) as of 2/25/2022

# Opportunities for Future Growth in Transplantation



Increased  
deceased donor  
**kidney use** rate



Increased DCDD  
**nonrenal organ**  
utilization rate



Increased  
**deceased donor**  
volume

*Use Rate: Organs recovered for transplant  
and successfully transplanted*

# ACKNOWLEDGEMENT

## There are some headwinds



### In the last 18 months:

- Brain dead donation is down 16%
- Hospital – OPO relationships are stressed (DCD and NRP)
- Regulator relationships are at an all-time low
- Legislative misinformation is ubiquitous
- Negative public campaign having an impact on registration

*How can we still meet our 60k goal?*



## HOW WE GET THERE:

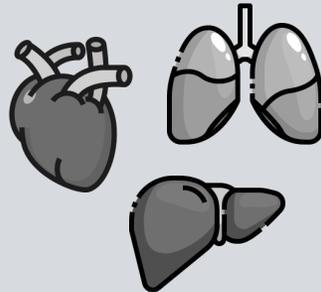
# Tactics need to adjust

1. Utilization of available kidneys paradigm shift
2. Adoption of new organ recovery techniques (e.g. NRP) will increase transplantable non-renal organs
3. Adoption of perfusion technologies (e.g. MRP) will increase transplantable organs of all types
4. New focus on donation in each of our institutions

# Opportunities for Future Growth in Transplantation



**Increased  
deceased donor  
kidney use rate**



**Increased DCDD  
nonrenal organ  
utilization rate**



**Increased  
deceased donor  
volume**

*Use Rate: Organs recovered for transplant  
and successfully transplanted*



HOW WE GET THERE:

# Increased kidney utilization

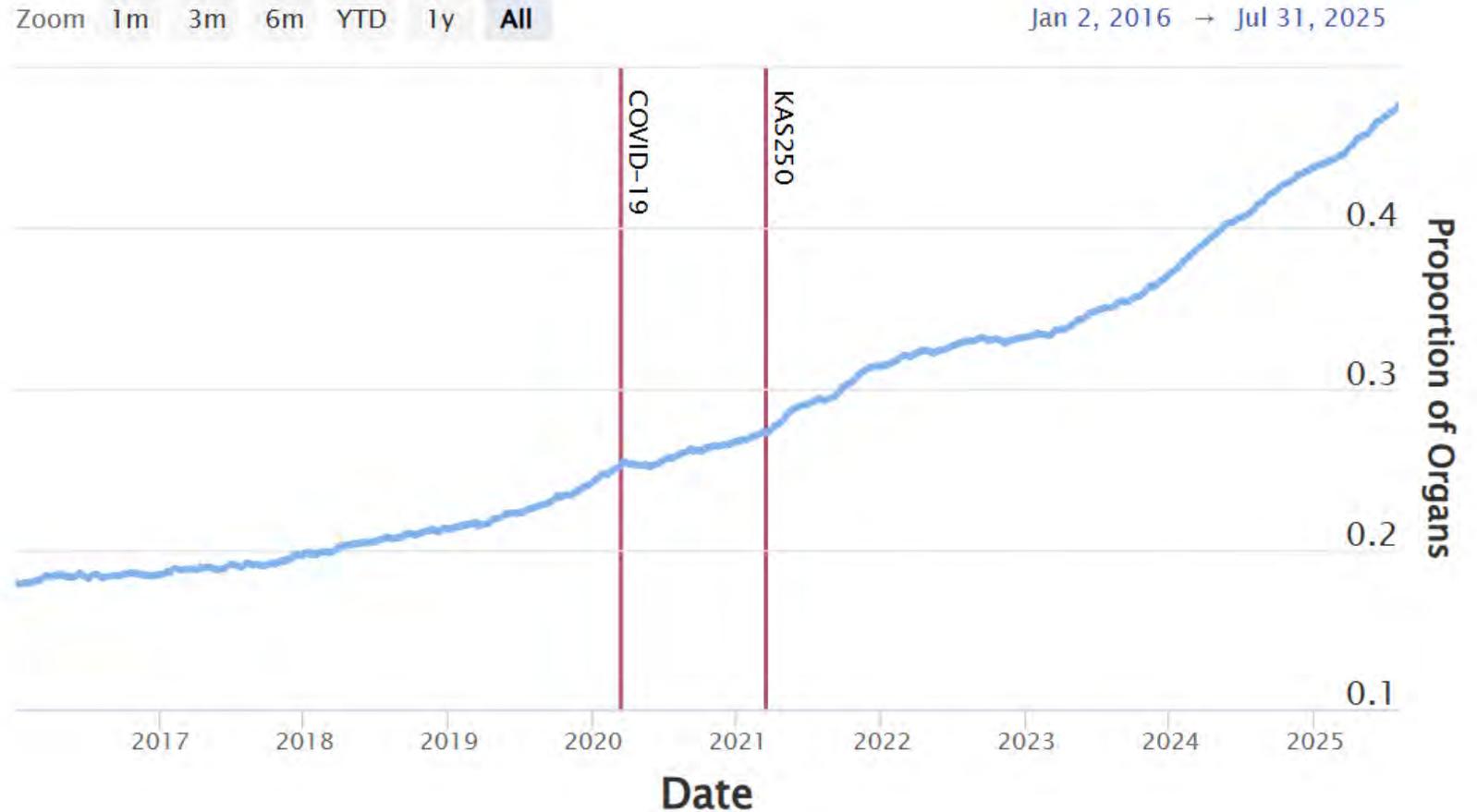
**The landscape has changed for kidney transplant**

Donor Characteristic Changes = **Opportunity**

Allocation Challenges = **Opportunity for Collaboration**



## Kidneys Recovered - Proportion DCD (National)



100% donation growth between 2022 and 2025 has been DCD,

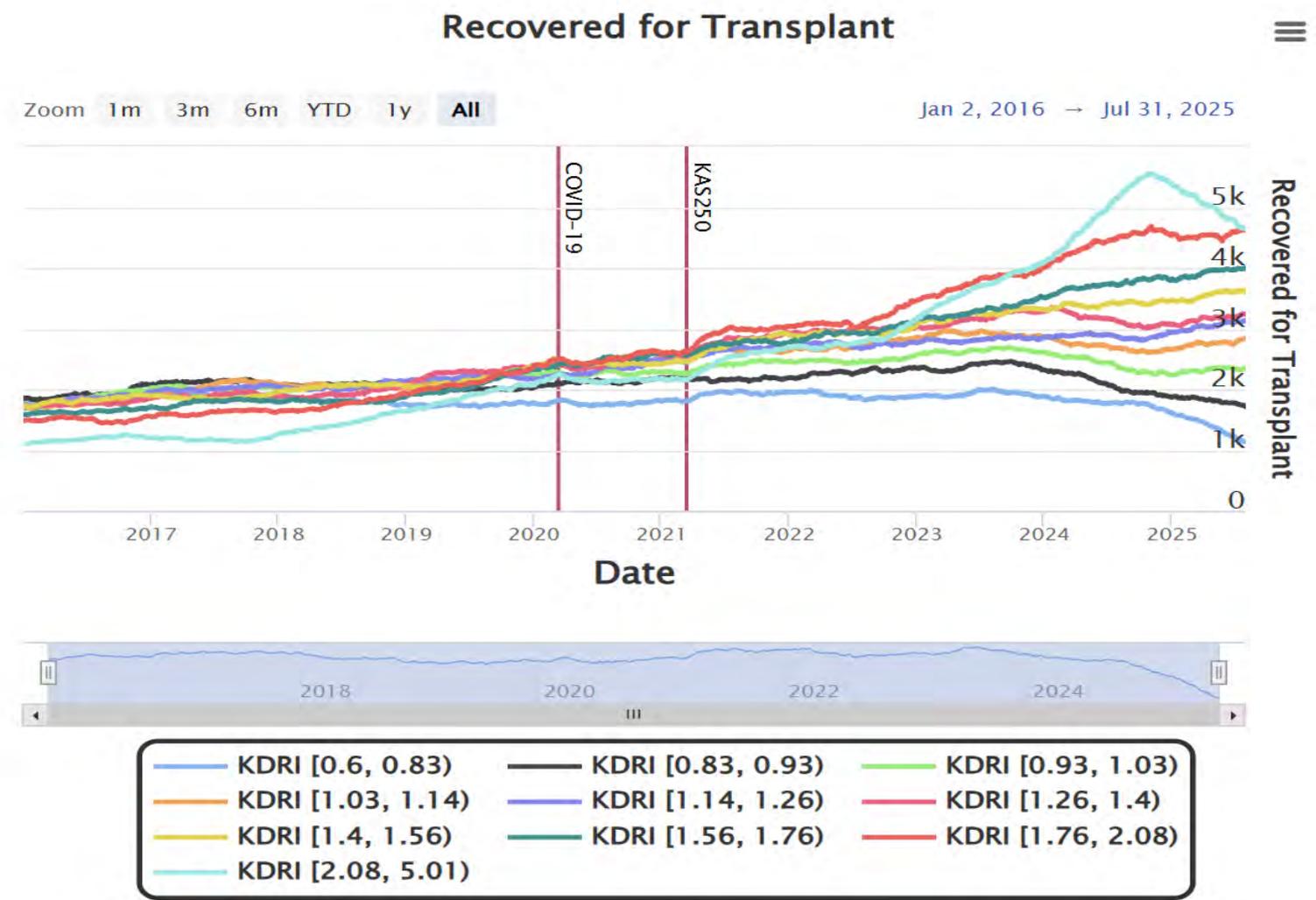
**AND**

80% of DCD growth has been donors > 50 years old



The quality of kidneys has changed

# Volume of Kidneys Recovered by KDRI (National)



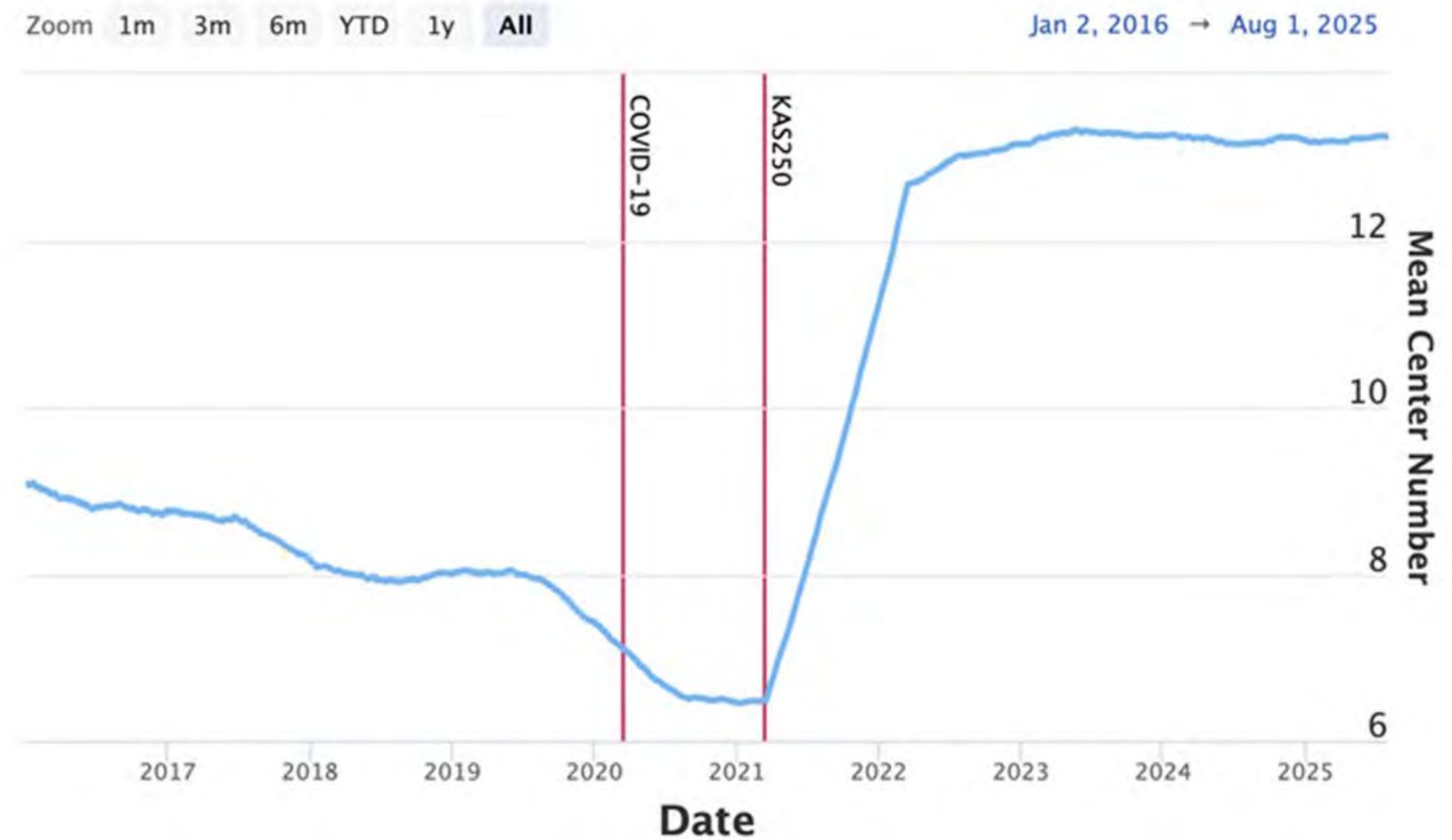
Source: SRTR Donation and Transplant System Explorer. Accessed 9/4/2025.



## Center Number at Sequence 50 (National)

**Allocation is harder:**

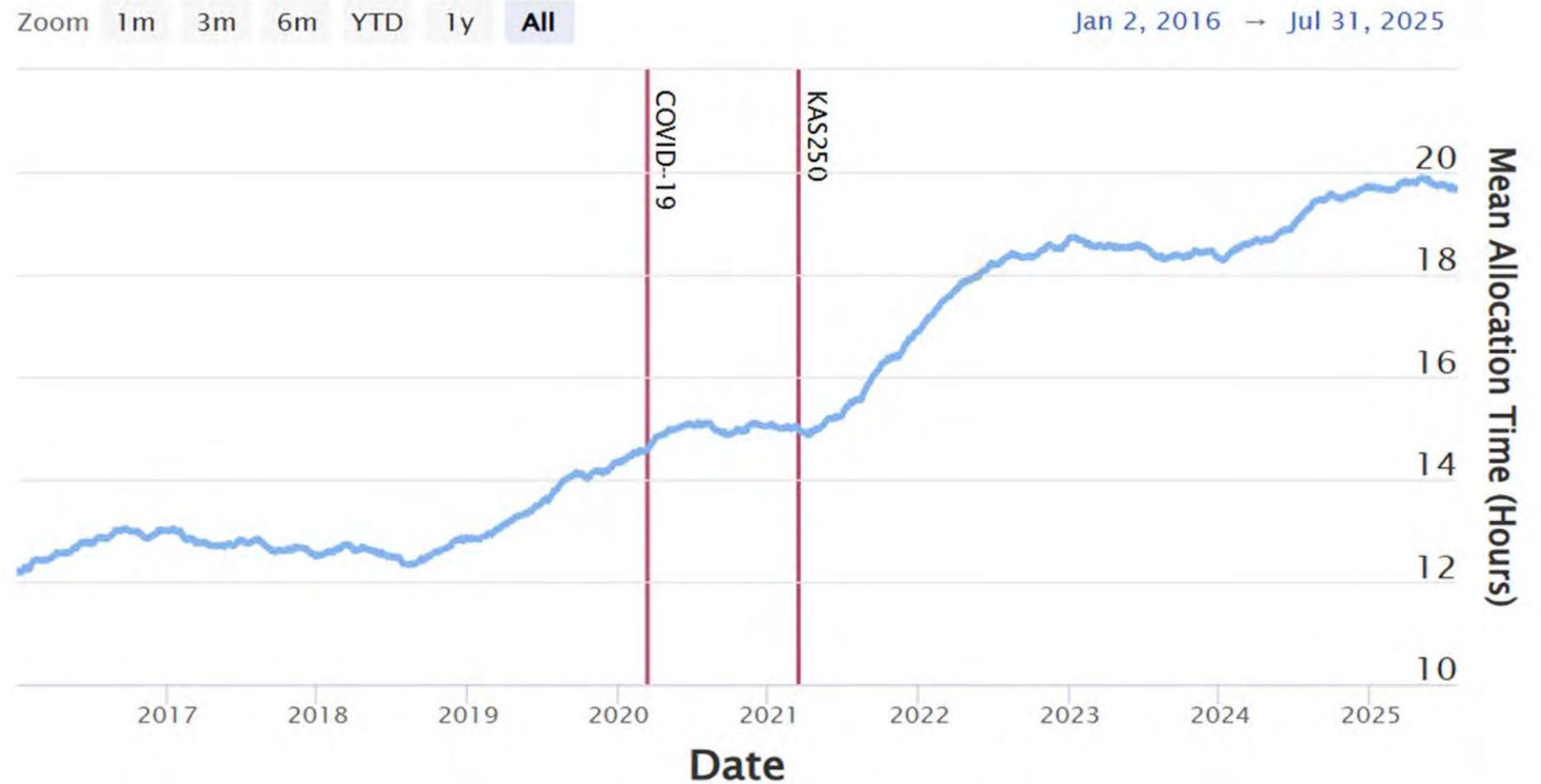
The number of transplant programs involved in placement of kidneys has doubled since KAS250



Source: SRTR Donation and Transplant System Explorer. Accessed 9/4/2025.



## Allocation Time (National)



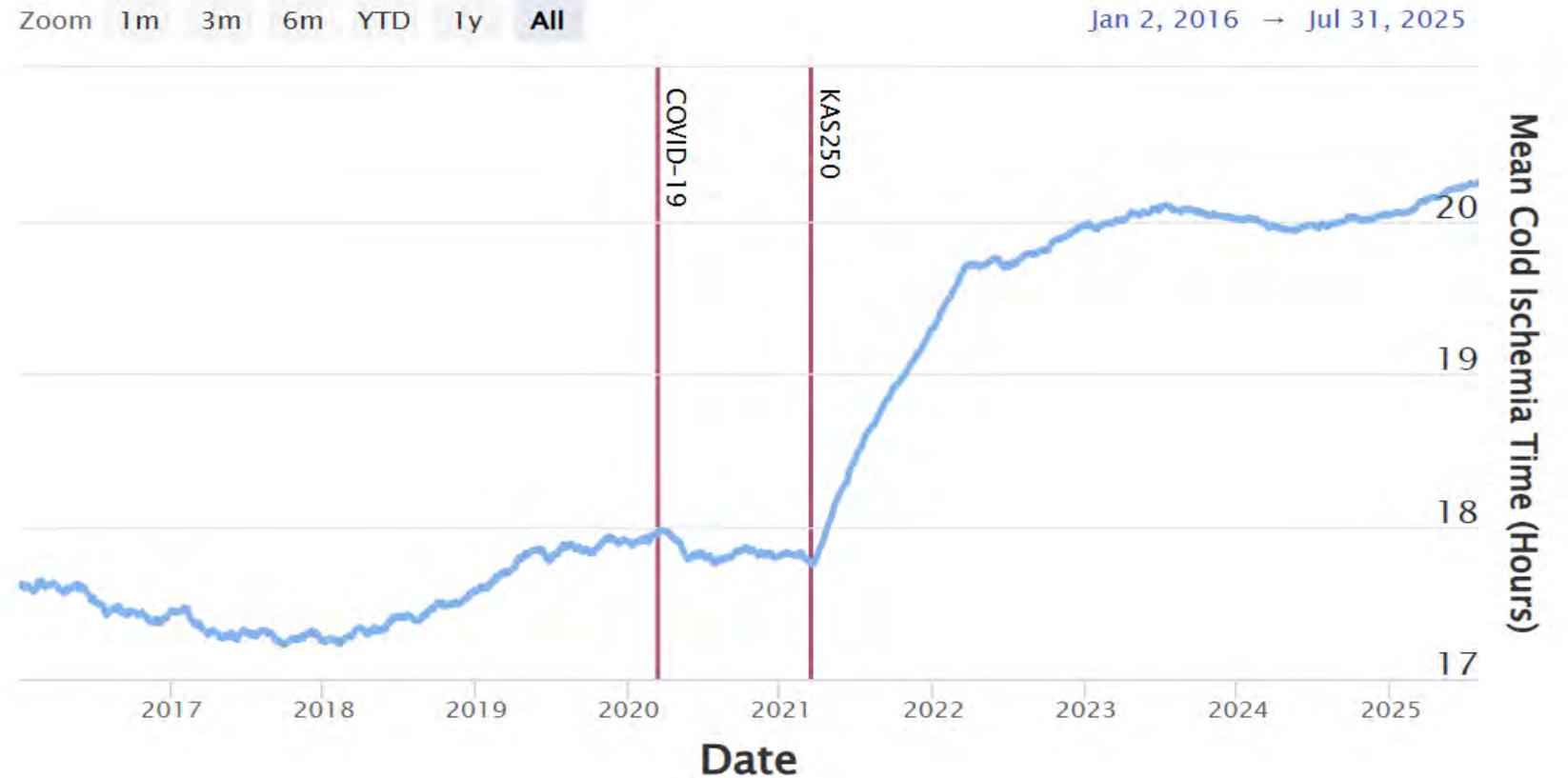
Time OPOs spend allocating kidneys has risen 67% from historical levels pre-COVID



# Allocation is harder:

50% of kidneys are now transplanted with > 20 hours of CIT

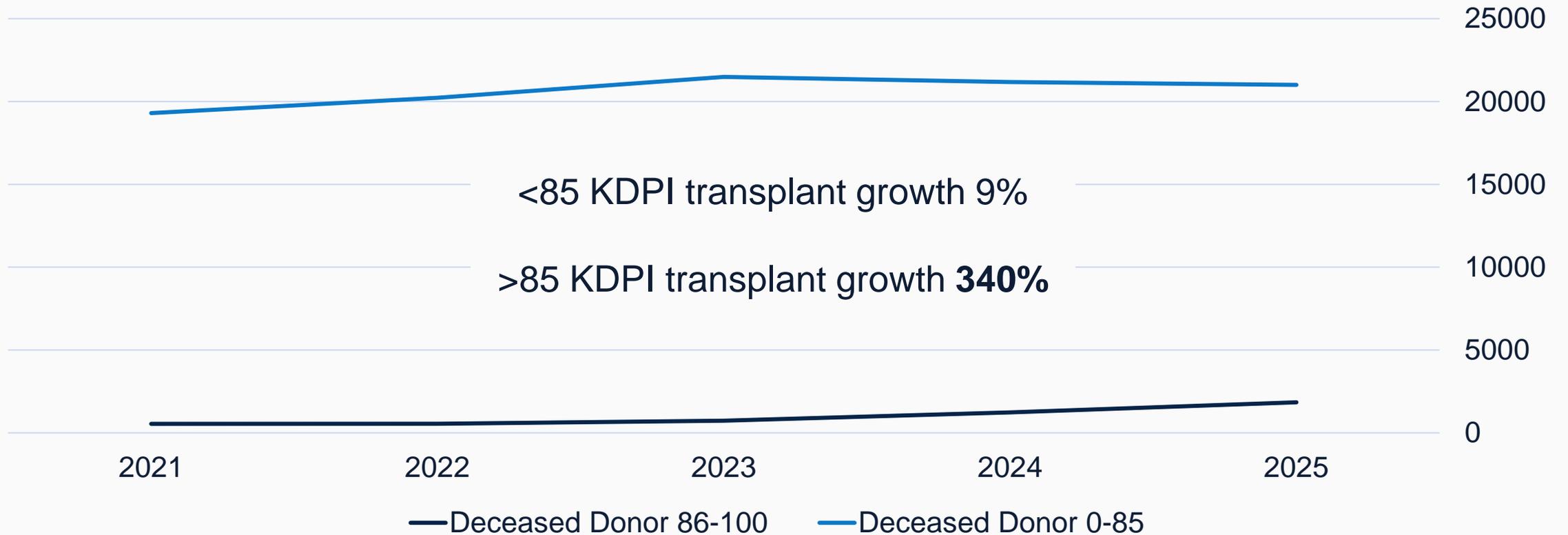
## Cold Ischemia Time (National)





# HOW WE GET THERE: Increased kidney utilization

## 5-Year National Kidney Transplant Growth

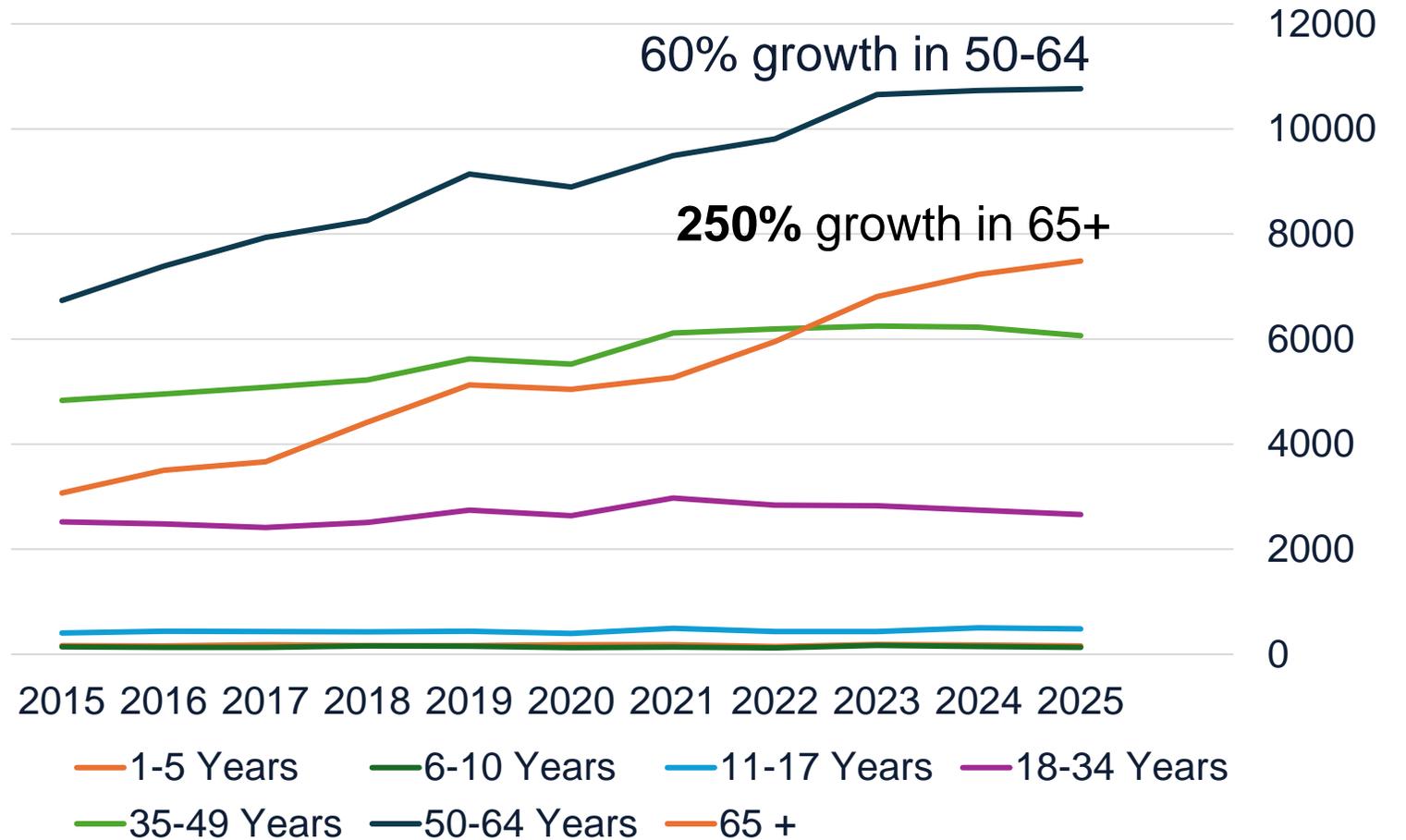


Based on OPTN data as of 9/8/2025. 2025 numbers annualized as of 7/31/2025.



We are transplanting more older patients

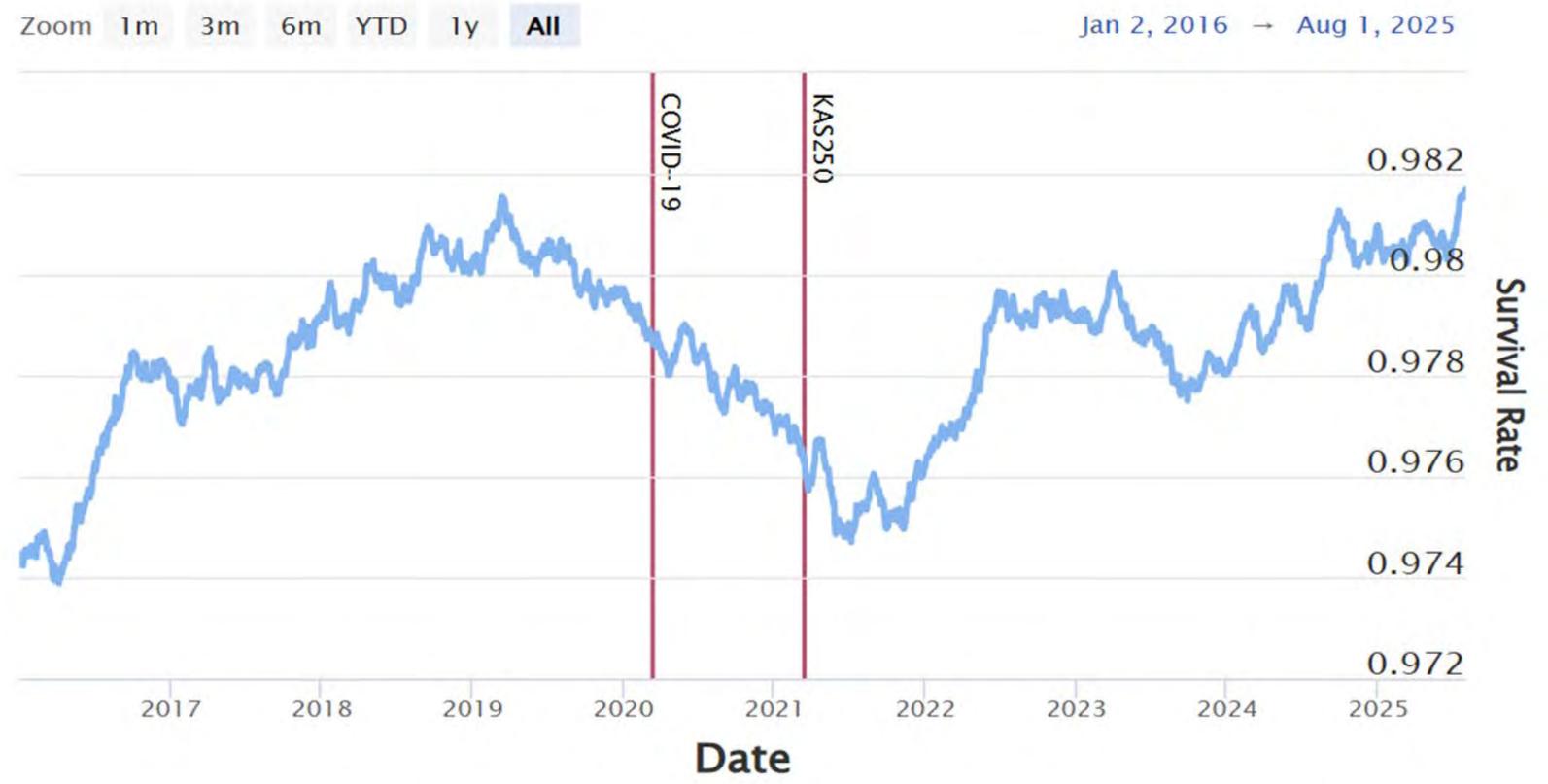
## Transplant Patient Age



Based on OPTN data as of 9/18/2025.



# 90-Day Graft Survival (National)

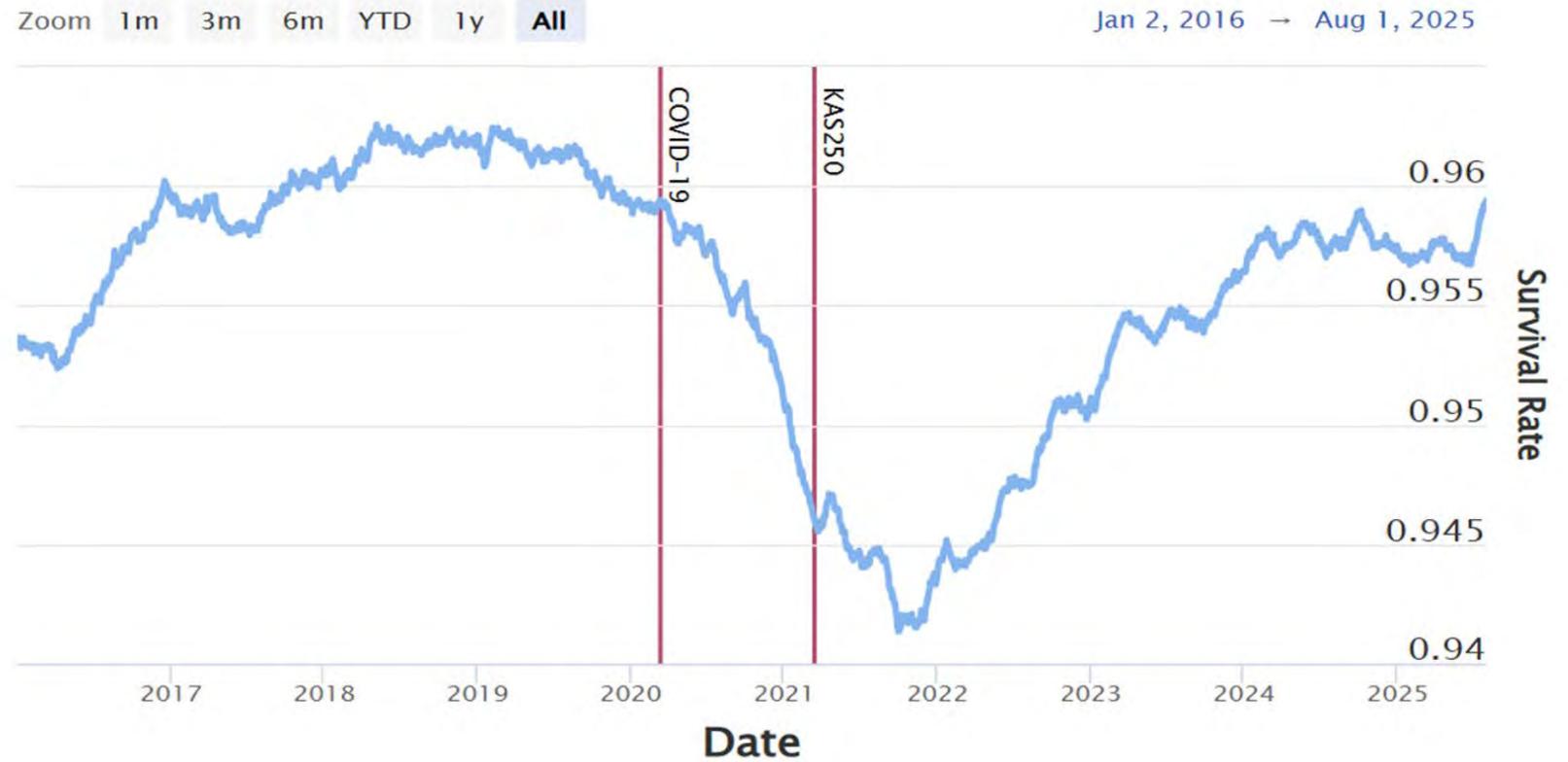


Despite growth in marginal kidney use, graft survival is improving!

Source: SRTR Donation and Transplant System Explorer. Accessed 9/4/2025.



# 1-Year Graft Survival (National)



Despite growth in marginal kidney use, graft survival is improving!



## HOW WE GET THERE:

# Increased kidney utilization

## Local utilization of marginal kidneys

- We want to get marginal kidney offers to appropriate patients quickly
- We need to allocate in-sequence, but the right patient may be down the list
- Solution: Collaboration between all centers and LifeSource!



## HOW WE GET THERE:

# Increased kidney utilization

## Example: Target Lists

- Use standard criteria to identify patients for marginal kidneys
- Maintain ready lists of patients for marginal offers
- Code out your patients down to target patients
- OPO is able to allocate in sequence

*This is just one possible solution.*



# HOW WE GET THERE:

## Increased kidney utilization

If we increase our **69%** deceased donor kidney **use rate** so far this year...

$$\frac{462 \text{ kidneys transplanted}}{666 \text{ kidneys recovered}} = 69\% \text{ use rate}$$

...to an **85%** **use rate**...

$$85\% \times 666 \text{ recovered kidneys} = 566$$

**...We would have over 100 additional transplantable kidneys.**

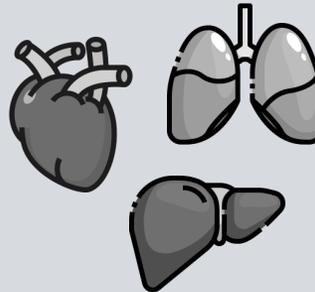
$$566 \text{ hypothetical} - 462 \text{ actual} = 104$$

# Opportunities for Future Growth in Transplantation



**Increased  
deceased donor  
kidney use rate**

+100 kidneys



**Increased DCDD  
nonrenal organ  
utilization rate**



**Increased  
deceased donor  
volume**

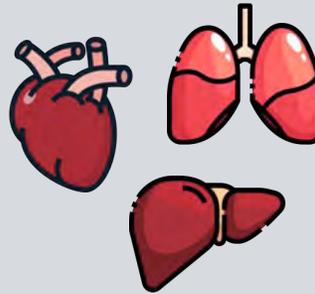
*Use Rate: Organs recovered for transplant  
and successfully transplanted*

# Opportunities for Future Growth in Transplantation



Increased deceased donor kidney use rate

+100 kidneys



Increased DCDD nonrenal organ utilization rate



Increased deceased donor volume

*Use Rate: Organs recovered for transplant and successfully transplanted*



**HOW WE GET THERE:**

# **Increased non-renal organ utilization**

**DCD yield increase**

**Expansion of NRP**

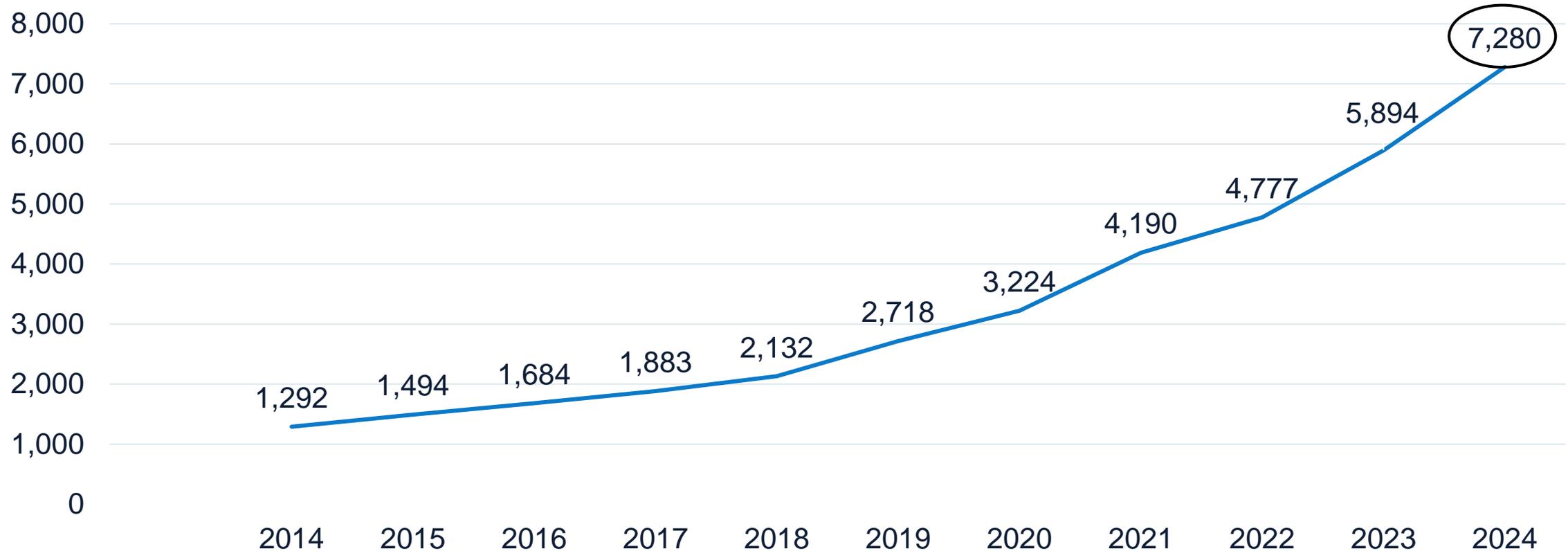
**Utilization of machine perfusion**



## HOW WE GET THERE:

# Increased non-renal organ utilization

### National DCD Donor Growth

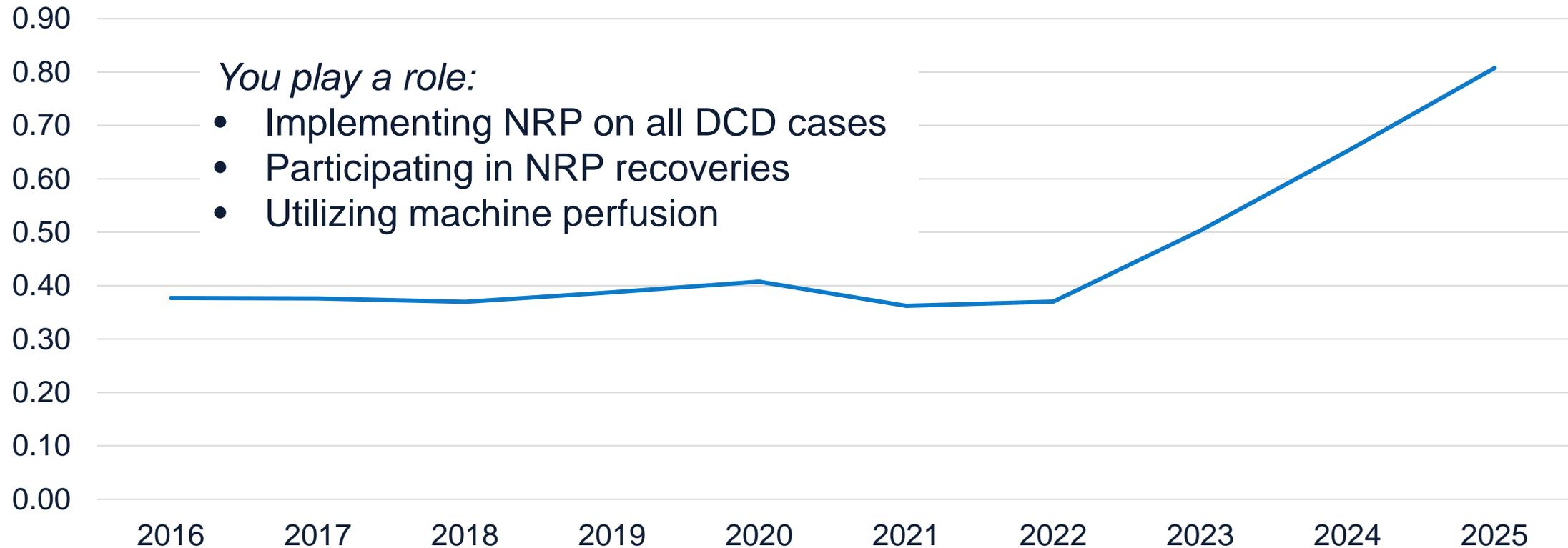




## HOW WE GET THERE:

# Increased non-renal organ utilization

### National DCD Non-Renal Organs Transplanted Per Donor

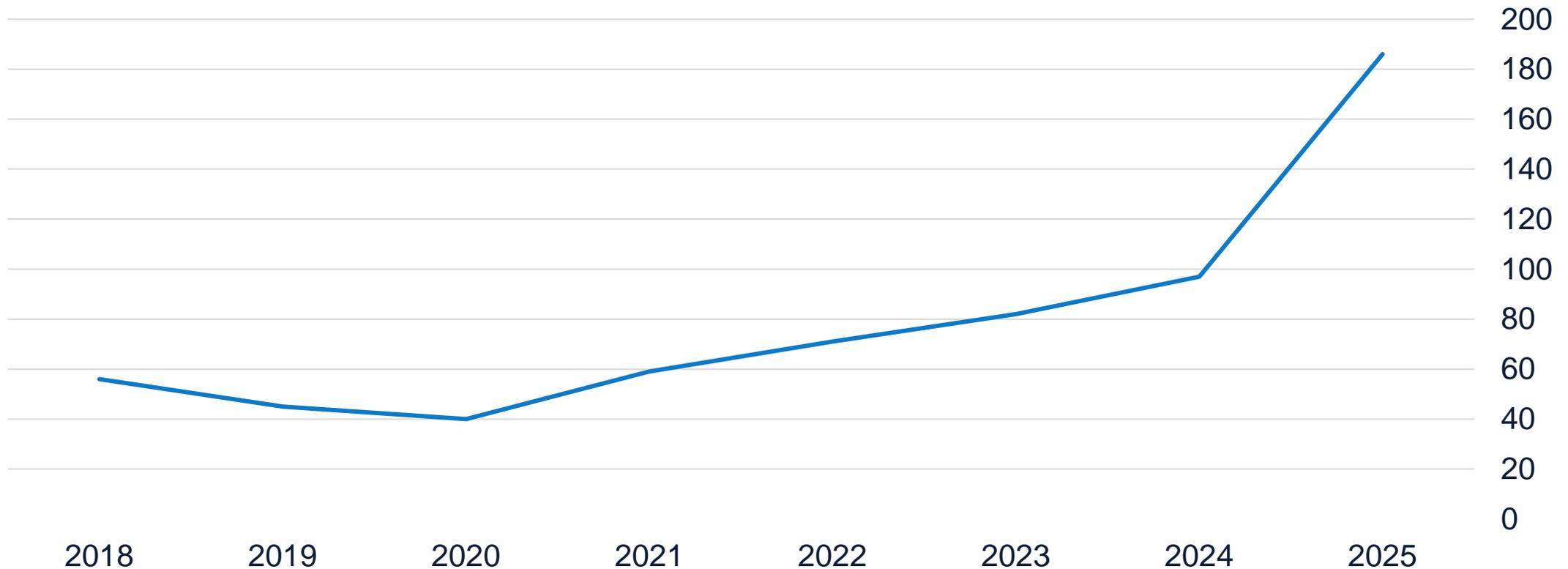




## HOW WE GET THERE:

# Increased non-renal organ utilization

### LifeSource DCD Donor Growth



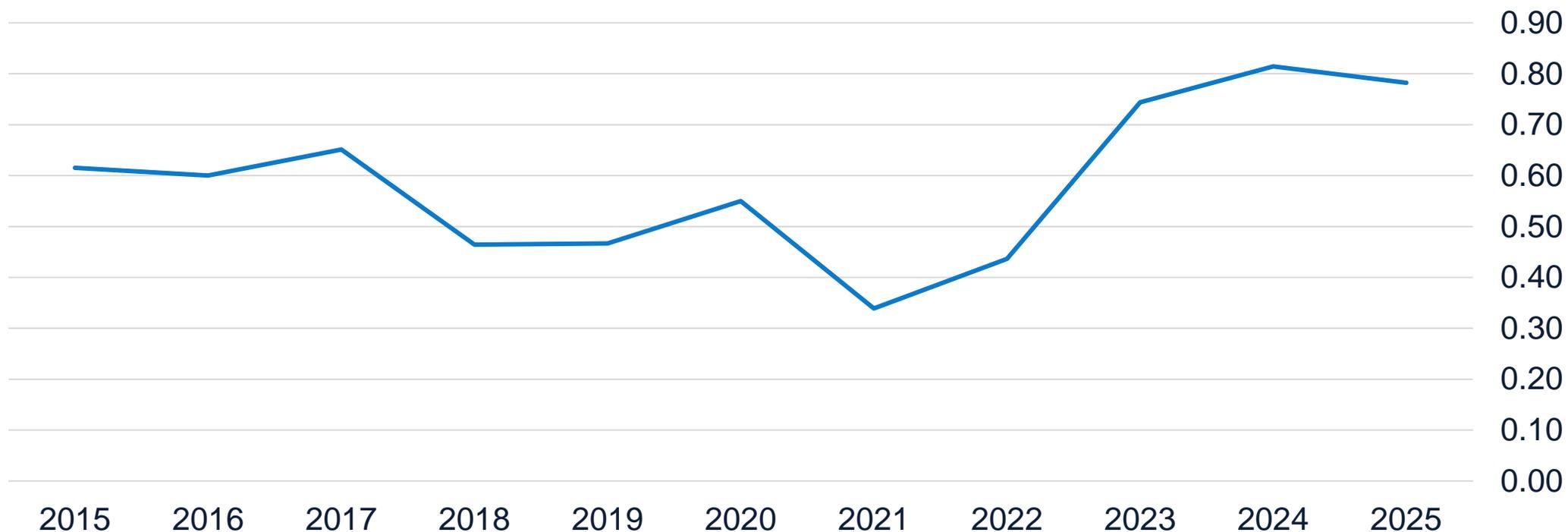
Based on OPTN data as of 9/16/2025. 2025 numbers annualized as of 8/31/2025.

## HOW WE GET THERE:

# Increased non-renal organ utilization



### LifeSource Nonrenal DCDD Organs Transplanted Per Donor (OTPD)



Based on OPTN data as of 9/8/2025. 2025 numbers through 8/31/2025.



## HOW WE GET THERE:

# Increased non-renal organ utilization

If we increase our rate of **0.78** nonrenal DCD OTPD so far this year...

...to a rate of **1.20**...

$$\frac{146 \text{ DCD nonrenal organs transplanted}}{186 \text{ DCD donors}} = 0.78 \text{ OTPD}$$

$$1.20 \text{ OTPD} \times 186 \text{ DCD donors} = 223 \text{ organs}$$

**...We would have 80 additional transplantable nonrenal organs.**

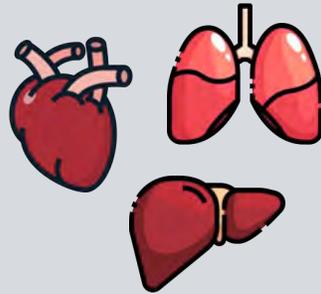
$$223 \text{ hypothetical} - 146 \text{ actual} = 77 \text{ (yes, we rounded up!)}$$

# Opportunities for Future Growth in Transplantation



Increased deceased donor kidney use rate

+100 kidneys



Increased DCDD nonrenal organ utilization rate

+80 nonrenal organs



Increased deceased donor volume

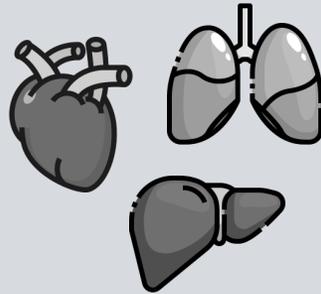
*Use Rate: Organs recovered for transplant and successfully transplanted*

# Opportunities for Future Growth in Transplantation



Increased deceased donor kidney use rate

+100 kidneys



Increased DCDD nonrenal organ utilization rate

+80 nonrenal organs



Increased deceased donor volume

*Use Rate: Organs recovered for transplant and successfully transplanted*



**HOW WE GET THERE:**

**Increased deceased donor volume**

**We need a renewed focus on the partnership  
between OPOs and donor hospitals**

**We can start with the largest potential hospitals:**

**Transplant Hospitals**



## HOW WE GET THERE:

# Increased deceased donor volume

Deceased donor volume increased **14%** year-over-year from 2020 to 2025.

$$\frac{353 \text{ donors in 2025}}{185 \text{ donors in 2020}} = 14\% \text{ CAGR (5y)}$$

Let's assume it **slows** to **10%** annually for the next 2 years...

$$353 \text{ donors} \times 10\% \text{ CAGR (2y)} = 428$$

**...We would have 75 additional deceased donors.**

$$428 \text{ hypothetical} - 353 \text{ actual} = 75$$



## HOW WE GET THERE:

# Increased deceased donor volume

Based on the **75** additional  
**deceased donors** we just  
calculated...

If we reached **3.0**  
**organs transplanted**  
**per donor**...

**...We would have 225 additional transplantable organs.**

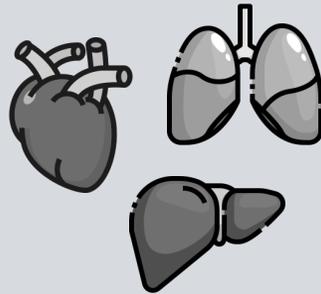
$$75 \text{ deceased donors} \times 3 \text{ OTPD} = 225 \text{ organs}$$

# Opportunities for Future Growth in Transplantation



Increased deceased donor kidney use rate

+100 kidneys



Increased DCDD nonrenal organ utilization rate

+80 nonrenal organs



Increased deceased donor volume

+225 organs

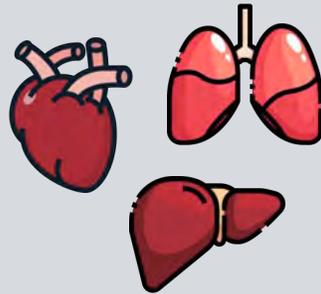
*Use Rate: Organs recovered for transplant and successfully transplanted*

# Opportunities for Future Growth in Transplantation



**Increased deceased donor kidney use rate**

+100 kidneys



**Increased DCDD nonrenal organ utilization rate**

+80 nonrenal organs



**Increased deceased donor volume**

+225 organs

**= over 400 additional transplantable organs locally**

# Summary of Opportunities for the Upper Midwest



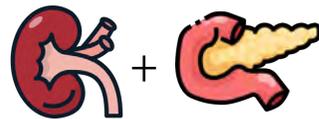
**959**

Deceased donor  
transplants in 2025

**400**

Additional  
transplantable organs

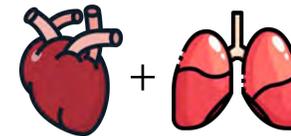
...And patient needs  
still exceed future  
supply



225



75



100

**What can each of us do to help the Upper Midwest  
reach 1,400 transplants?**

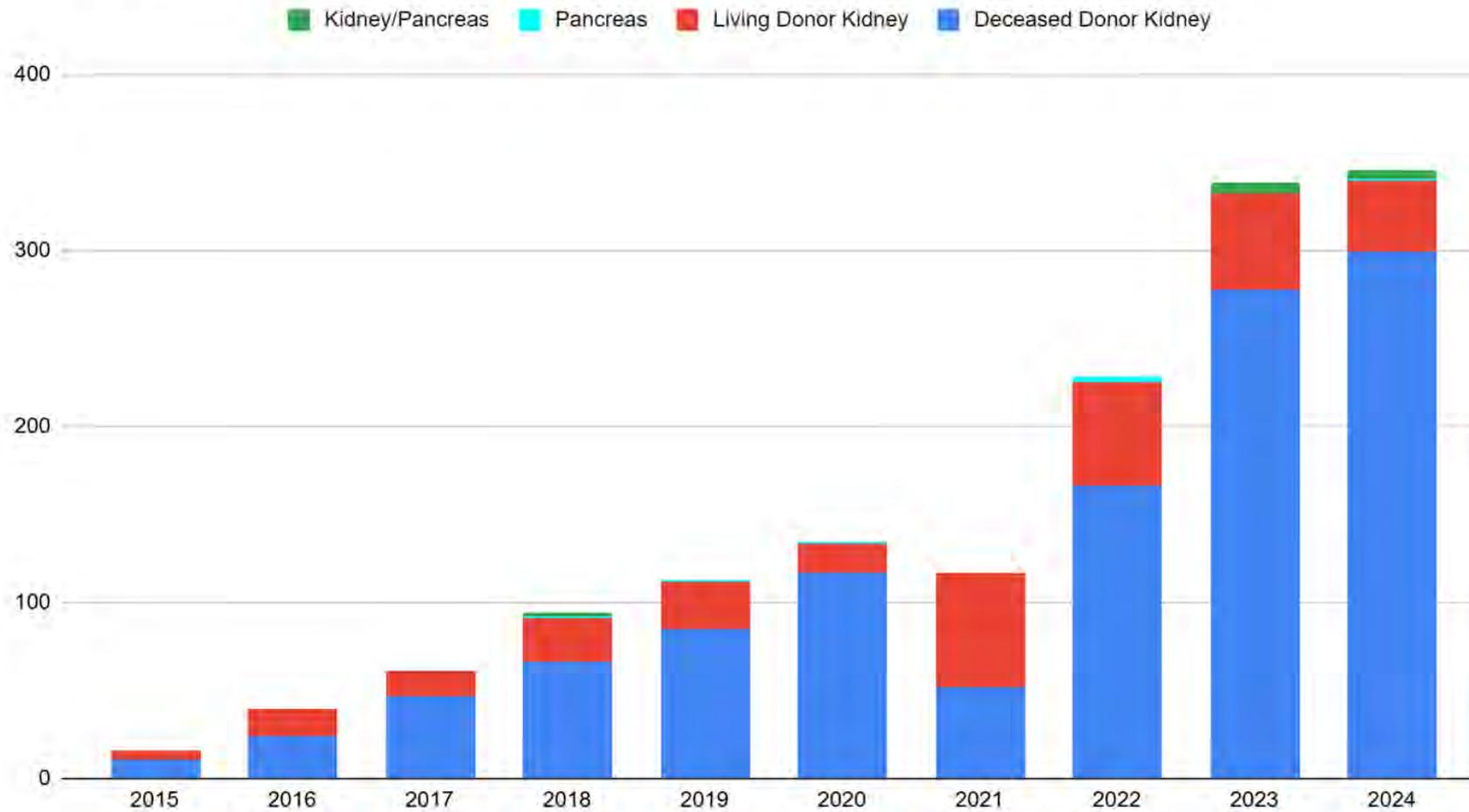
# The Transformation of Transplantation at Hackensack University Medical Center *The Secret Sauce and Lessons Learned*

Michael J. Goldstein MD FACS  
Division of Organ Transplantation  
Hackensack University Medical Center  
Hackensack Meridian *Health*



Hackensack Meridian  
Hackensack University  
Medical Center

## Transplant Volume by Donor Type



**35% growth in transplant volume in 2023.**

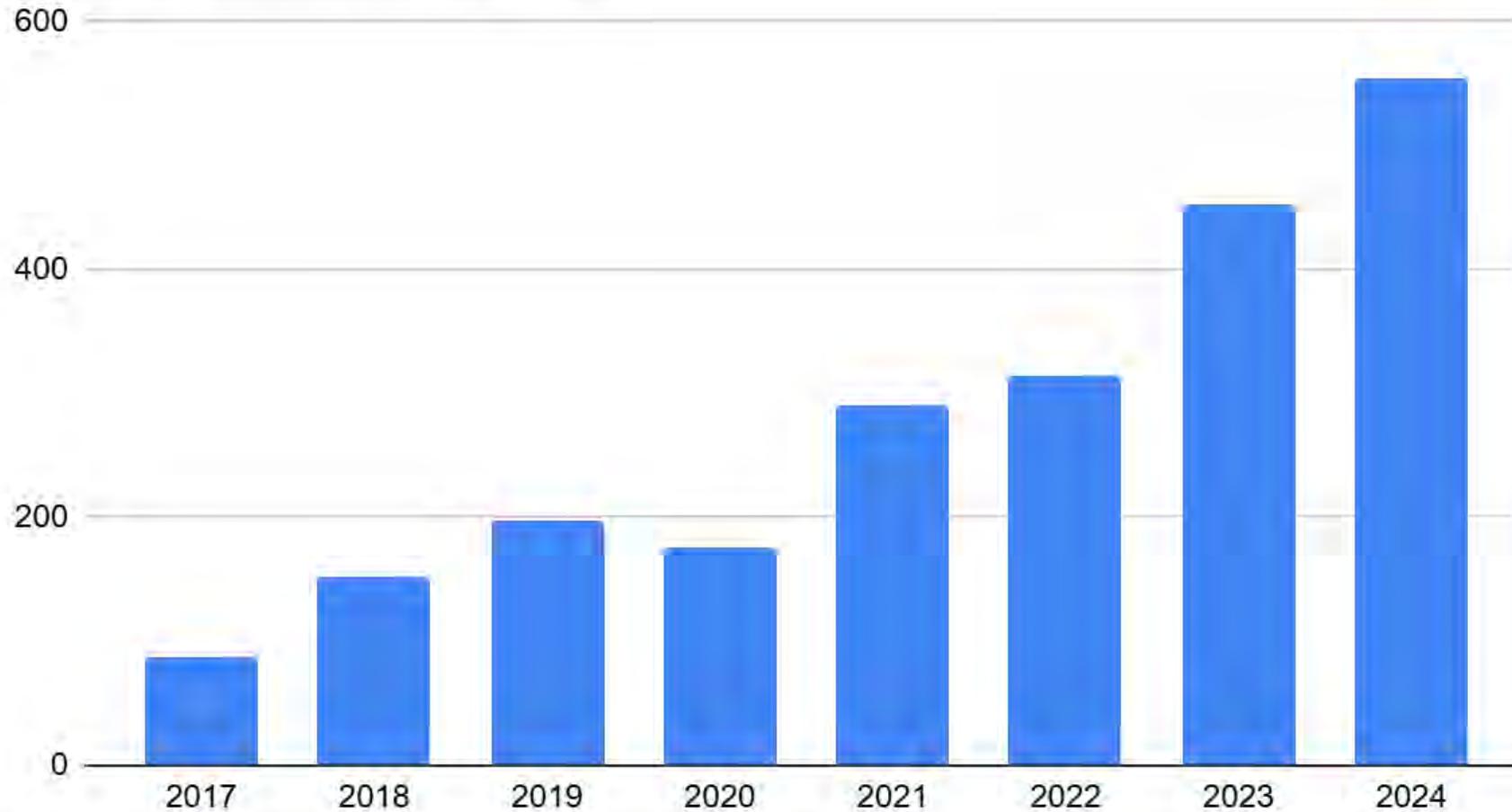
**537% over 6 year period (2018-2024)**

Based on OPTN data as of January 28, 2025.



Hackensack Meridian  
Hackensack University  
Medical Center

## Waitlist Additions by Year



**44% growth in the registrations to the waiting list in 2023.**

**22% growth in the registrations to the waiting list in 2024.**

Based on OPTN data as of January 28, 2025.



Hackensack Meridian  
Hackensack University  
Medical Center

# Offer Acceptance January 2025

Subgroup	History of Acceptance	Number of Offers	Number of Acceptances	Expected Acceptances	Offer Acceptance Ratio
Overall	Above Average	6005	101	42.68	2.31
KDRI < 1.05	Somewhat Above Average	434	15	9.75	1.45
1.05 <= KDRI < 1.75	Above Average	3511	63	25.11	2.40
KDRI >= 1.75	Above Average	2060	23	7.82	2.55
KDPI >= 60	Above Average	3492	46	15.74	2.71
DCD	Above Average	1885	40	12.69	2.86
Hard-to-Place (Offer Number > 100)	Above Average	5340	68	18.35	3.44
COVID Positive	Somewhat Above Average	129	5	1.88	1.80
PHS Increased Infectious Risk	Average	1044	9	7.76	1.13
HCV+	Somewhat Above Average	87	5	1.95	1.77
Weekend	Above Average	1758	19	10.23	1.72
Pediatric Candidates	Somewhat Below Average	131	1	1.91	0.77
Adult Candidates	Above Average	5874	100	40.77	2.38



# HUMC ranks #1 in the US in transplant rate of any medium to large center over 250 person/years



SCIENTIFIC  
REGISTRY OF  
TRANSPLANT  
RECIPIENTS

**Hackensack University Medical Center**  
Center Code: NJHK  
Transplant Program (Organ): Kidney  
Release Date: January 7, 2025  
Based on Data Available: October 31, 2024

SRTR Program-Specific Report  
Feedback?: [SRTR@SRTR.org](mailto:SRTR@SRTR.org)  
1.877.970.SRTR (7787)  
<http://www.srtr.org>



Hackensack Meridian  
Hackensack University  
Medical Center

For kidney transplant candidates, this measure has the **largest impact on survival after listing**. 1 year kidney survival includes only candidates who received a transplant among these three measures.

**Hackensack University Medical Center**  
 Hackensack, NJ  
 Report: [PDF](#) | [Interactive](#)

Center	Distance	Transplants from Deceased Donors in a year	Transplants from Living Donors in a year	Getting a Deceased Donor Transplant Faster	1-Year Kidney Survival
Hackensack University Medical Center	N/A	296 ADULTS	40 ADULTS	5/5	4/5
[Redacted]	N/A	291 ADULTS	93 ADULTS	4/5	3/5
[Redacted]	N/A	76 ADULTS	13 ADULTS	3/5	2/5
[Redacted]	N/A	1 ADULTS	0 ADULTS	3/5	Not Assessed
[Redacted]	N/A	54 ADULTS	23 ADULTS	3/5	3/5



HUMC

HUMC (median waiting time)

HUMC	8.4 months
------	------------

#1 NJ, NY Metro, PA for shortest waiting time to transplantation

Lowest pre-transplant mortality rate

#1 NJ for 1-year kidney graft survival



SCIENTIFIC  
 REGISTRY OF  
 TRANSPLANT  
 RECIPIENTS

**Hackensack University Medical Center**  
 Center Code: NJHK  
 Transplant Program (Organ): Kidney  
 Release Date: January 7, 2025  
 Based on Data Available: October 31, 2024

SRTR Program-Specific Report  
 Feedback?: [SRTR@SRTR.org](mailto:SRTR@SRTR.org)  
 1.877.970.SRTR (7787)  
<http://www.srtr.org>



Hackensack Meridian  
 Hackensack University  
 Medical Center

# The HMH Secret Sauce to maximizing organ acceptance

- Team Culture: Collaborative, Courageous, Compassionate
- Data-driven performance excellence: Robust data collection, review, and reporting. If it isn't measurable, it isn't necessary!
- Waitlist management program: optimizes organ acceptance for the right patient
- OPO Partnerships for shared success: increasing efficiency of organ acceptance and high reliability in organ placement
- Aggressive Clinical Surgical and Medical Styles:
  - High organ acceptance rates to minimize waiting times and increase patient access to transplantation
  - Donor/recipient risk matching through listing risk assessment and waitlist management
  - Hospital-based organ preservation team maximizes organ acceptance with less concern over CIT, time of day, and distance
  - Review of kidney biopsies at the transplant center
  - Immunosuppression management to reduce DGF and prolonged graft survival



# Lessons Learned to Create Transplant Center Capacity and Increase Organ Utilization - Change Package 2024

- Vision
- Culture
- Resource Management
- Patient and Community Education
- Aggressive Clinical Style



# Vision for Growth



- Build quality first, growth follows closely behind
- More is not better; but better is more
- Build transparency and accountability to the C Suite
- The C Suite has to want it as much if not more than you
- Budget for less and meet your goals, promise less and over produce
- Understand and define the center's identity within the hospital and the network...it's not all about you

# Culture for Growth



- Redefine performance priorities.
  - Transplanting more people is more valuable to the community than 1-year graft survival.
  - Focusing on survival impedes growth and organ utilization, while reducing community access to transplantation
  - Reducing patient waiting times is more important to them than differences in KDPI.
- Create a team with shared accountability
  - Maintain transparency of data reporting, annual performance reviews, SRTR reports
  - Seek team input on program direction
- Not every organ is suitable for a particular recipient, but there is a recipient for all suitable organs
  - Always have a ready patient for all types of organs
  - Anticipate and prevent organ loss

# Resource Management for Growth



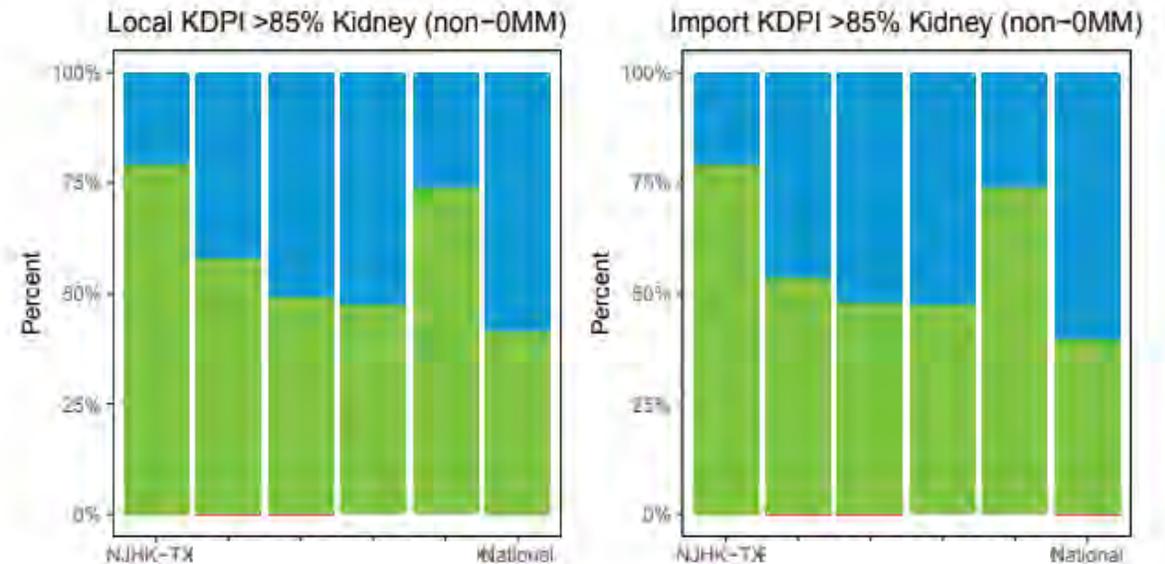
- Develop offer acceptance management team to reduce nurse burnout and improve daily work efficiency
- Need to build outpatient, inpatient, perioperative, and lab support services simultaneously
- Share growth and urgency needs with periop leadership to develop strategies for ready ORs and staffing for time sensitive cases.
- Optimize organ transport, delivery, and custody process for high volume practice
- Develop center-based organ perfusion services to limit the outside resources needed to utilize organs
- Optimize outpatient infusion services to provide strategies to reduce length of stay and prevent readmission

# Patient and Community Education for Growth



- In our practice, patients value short waiting times for transplantation more than all other factors or outcomes.
- Educate early and often about living donation, KDPI>85, increased social risk and infectious risk organs
- Give feedback to community docs and dialysis units about the status of patients in your program monthly or quarterly. “The report card”
- Educate the dialysis professional community about center vision, goals, and style. Develop and optimize referral intake strategies.
- Building trust within the community

Figure 12. Willingness to Accept >85% KDPI (non-0MM) on September 30, 2023 as of October 6, 2023



Willing to Accept KDPI >85%: Unwilling Willing (Missing)

# Aggressive Clinical Style for Growth



- Organ acceptance practice
  - “KDPI” doesn’t matter
  - The 3 “no’s” for go in donor selection
    - Was the renal function abnormal at baseline in the donor before death - NO
    - Is there any evidence of chronic kidney disease (history, proteinuria, biopsy evidence, radiologic) - NO
    - If there is donor AKI, are there extreme or significant factors to reduce organ recovery (Age, DIC, prolonged CIT, prolonged WIT for DCD, prolonged anuria or dialysis) - NO
- Waitlist management program with ready patients for donor risk criteria
- Organ perfusion readiness 24/7, pump everything... mitigates DGF, reduces length of stay and improves operating margins
- Organ-specific tailored immunosuppression to mitigate DGF
  - non-CNI based regimens or bridge therapy
- Medical management style to mitigate effects of DGF and reduce length of stay

# Aggressive Clinical Style for Growth



- Robust Quality reviews and dashboards, transparency of data review
- Growth creates variability, need to develop strategies for risk mitigation
- Maintain HRO mentality and culture
- “Be courageous without being careless” - Dr. Ken Kizer



# Growth in Liver Transplant

---

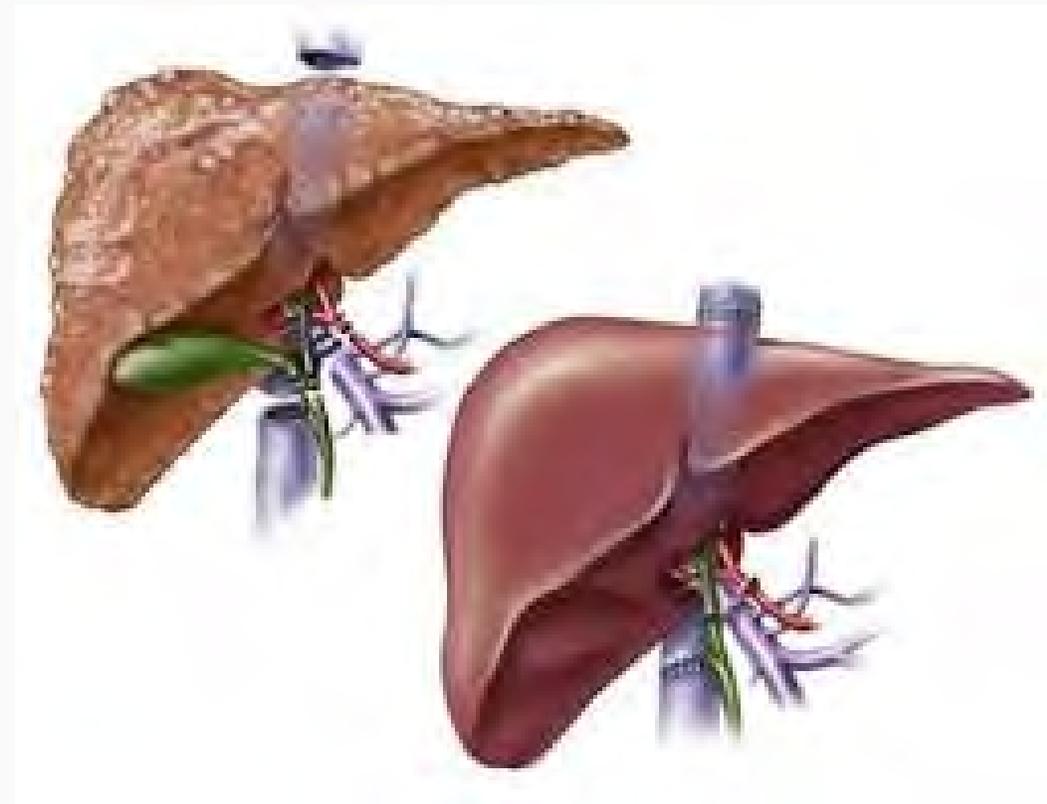
Andrew Adams MD/PhD

University of Minnesota/M Health Fairview

# Liver Disease and Liver Transplantation

---

- ~5 million adults with Cirrhosis
- Estimated 100 million with liver diseases such as fatty liver disease
- Over 10,000 liver transplants are performed each year
- Incidence of liver disease is increasing with a shifting etiology
- Excellent outcomes >95% 1yr survival
- Advances in immunosuppression, anesthesia, critical care, etc
- Use of new technologies like normothermic perfusion has been a disruptive advance



# Critical Steps Towards Growth

---

- Strengthen/Expand the multidisciplinary team
- Foster strong referral relationships
- Refine donor and recipient evaluation processes
- Adapt to new opportunities/technologies
- Ensure excellent outcomes

# Multidisciplinary Team



**Providers-  
MDs/APPs**



**Social Workers/  
LADC/LPCC**



**Dietitians**



**Pharmacists**



**Coordinators**



**Operations**



# Dedicated Liver Anesthesia Team

---

- Led by Vinh Nguyen
- Call pool of 6-8 anesthesiologists
- Specialized training in liver transplant and/or cardiac
- Echo certified
- Collaborative
- Research

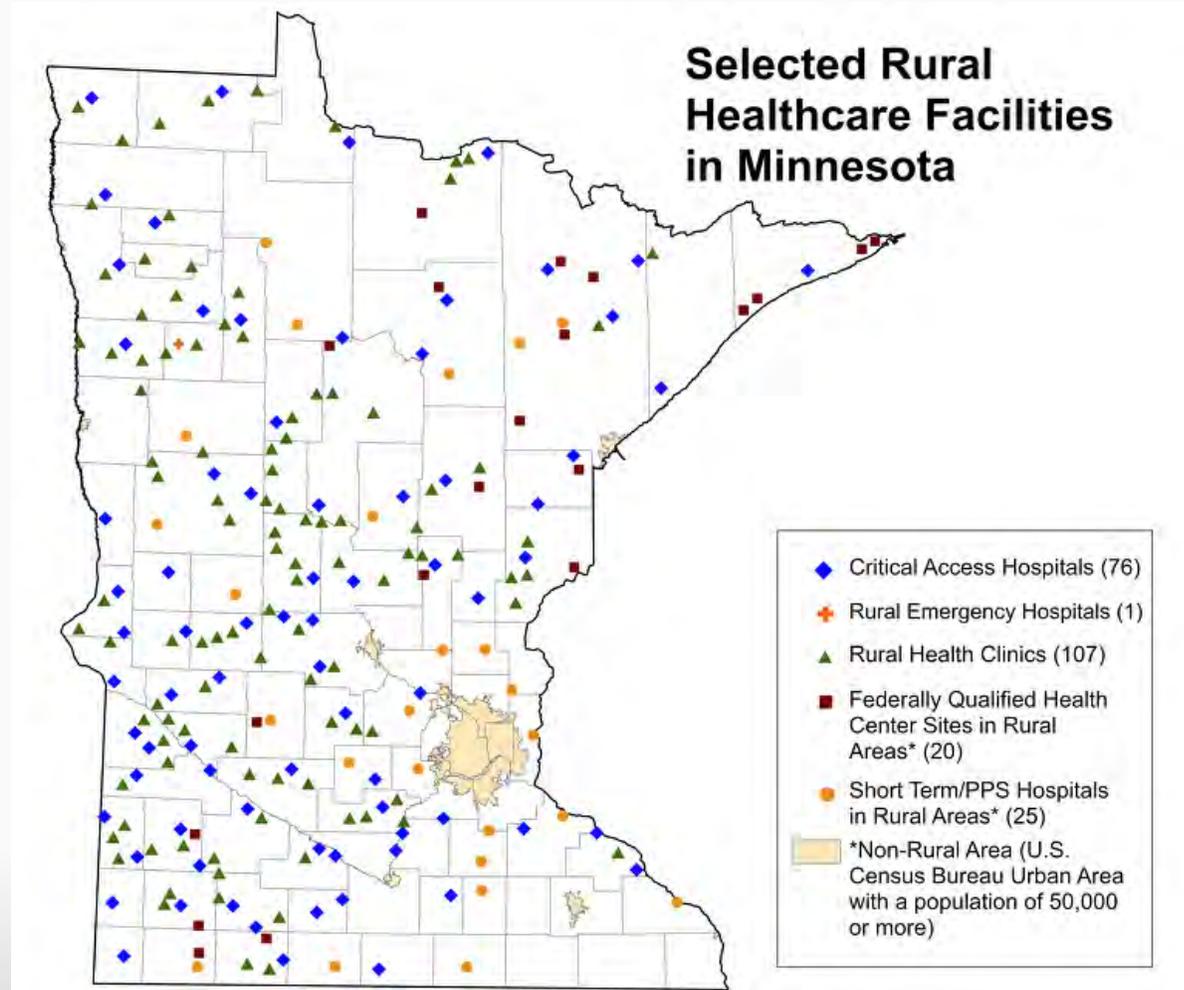




Leadership Team

# Serving the Community/Outreach

---



Data Source(s): data.HRSA.gov,  
U.S. Department of Health and Human  
Services, July 2025

# 2024 | More transplants than ever before



**3.3%**  
increase  
over 2023\*

Exceeded

**48,000**

lifesaving transplants total



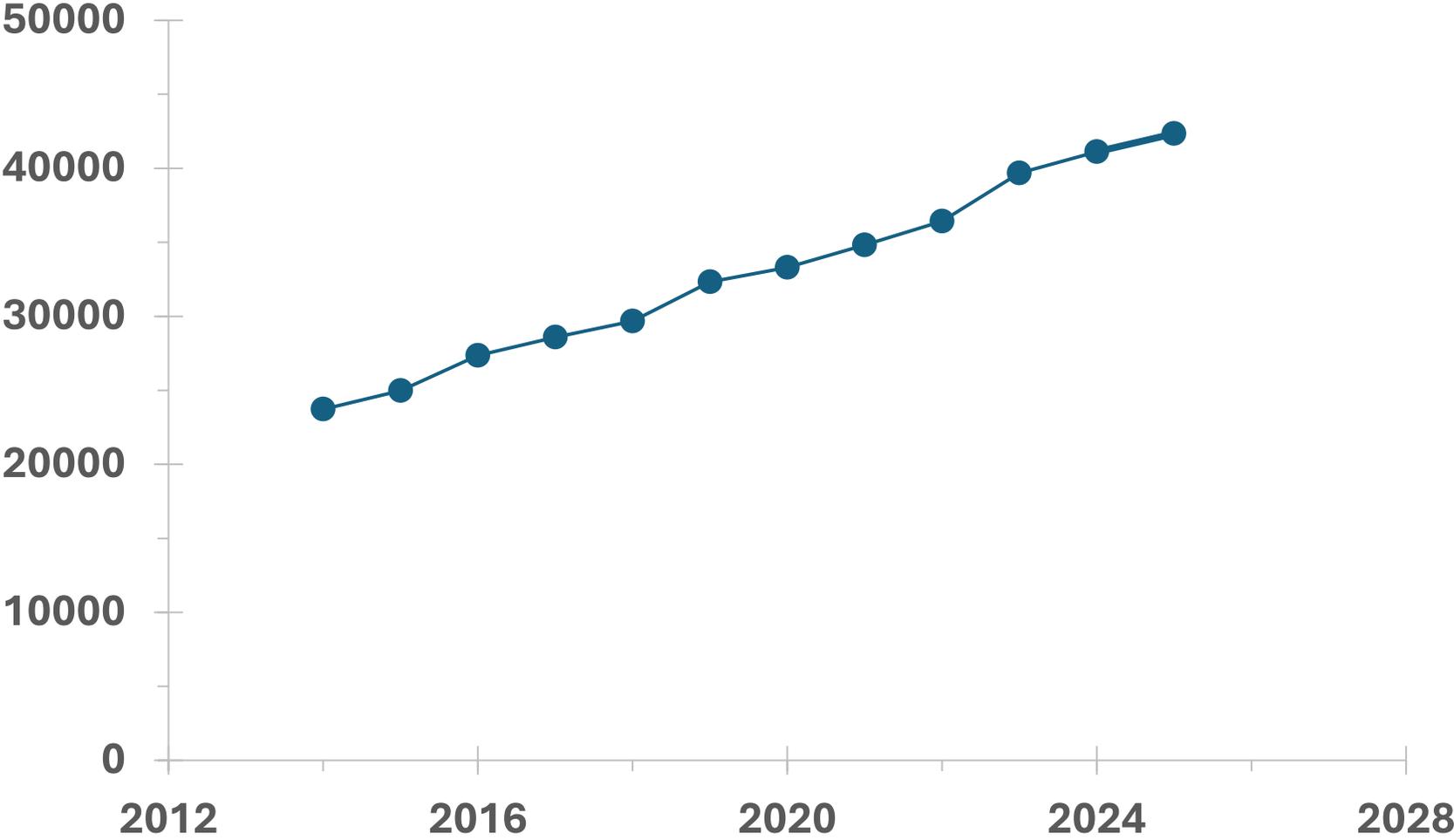
**23.3%**  
increase  
since 2020\*

 **Thanks to generous organ donors!**

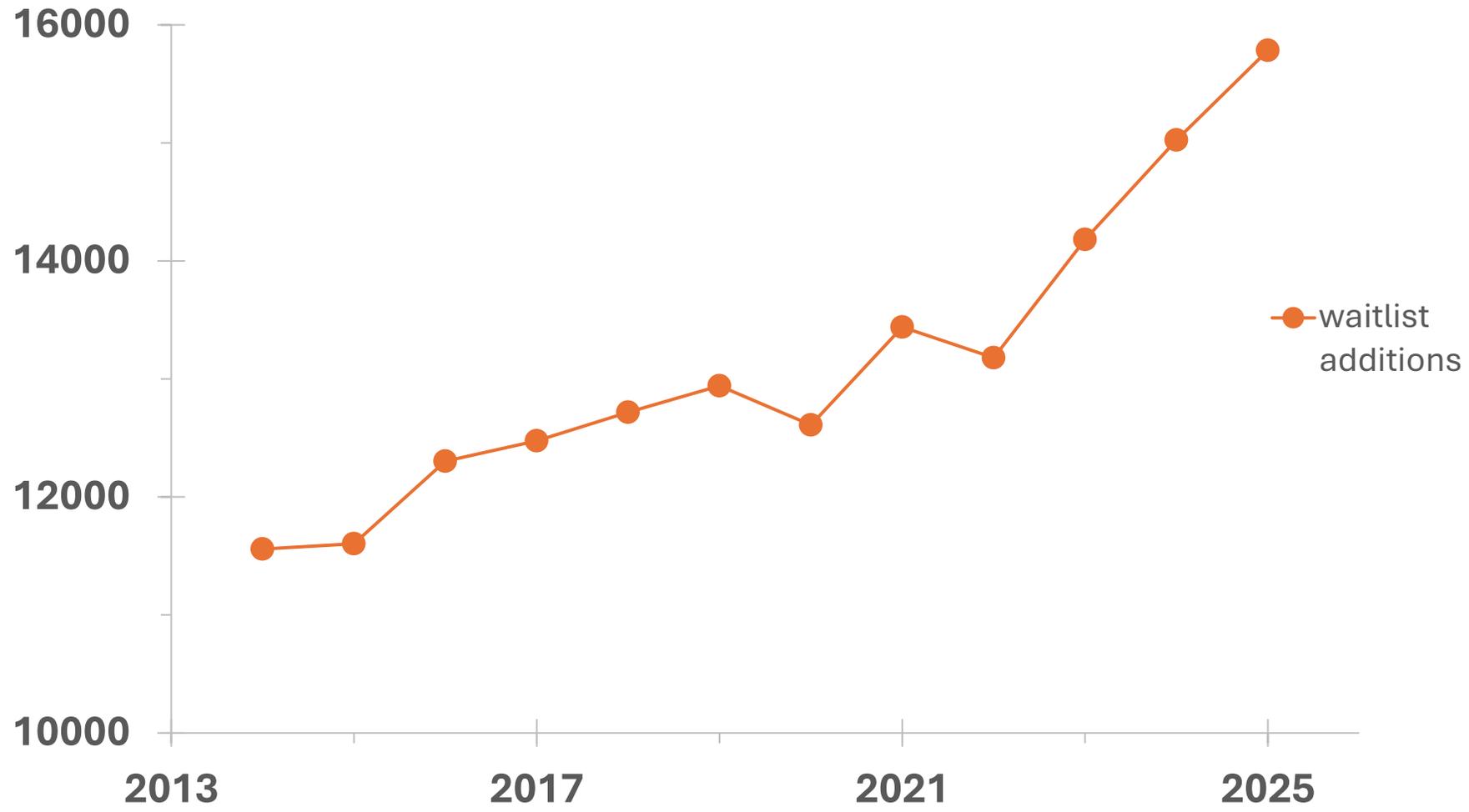
\*Based on OPTN data as of Jan. 15, 2024.  
Data subject to change based on final data submission completion.

**OPTN** Organ Procurement & Transplantation Network

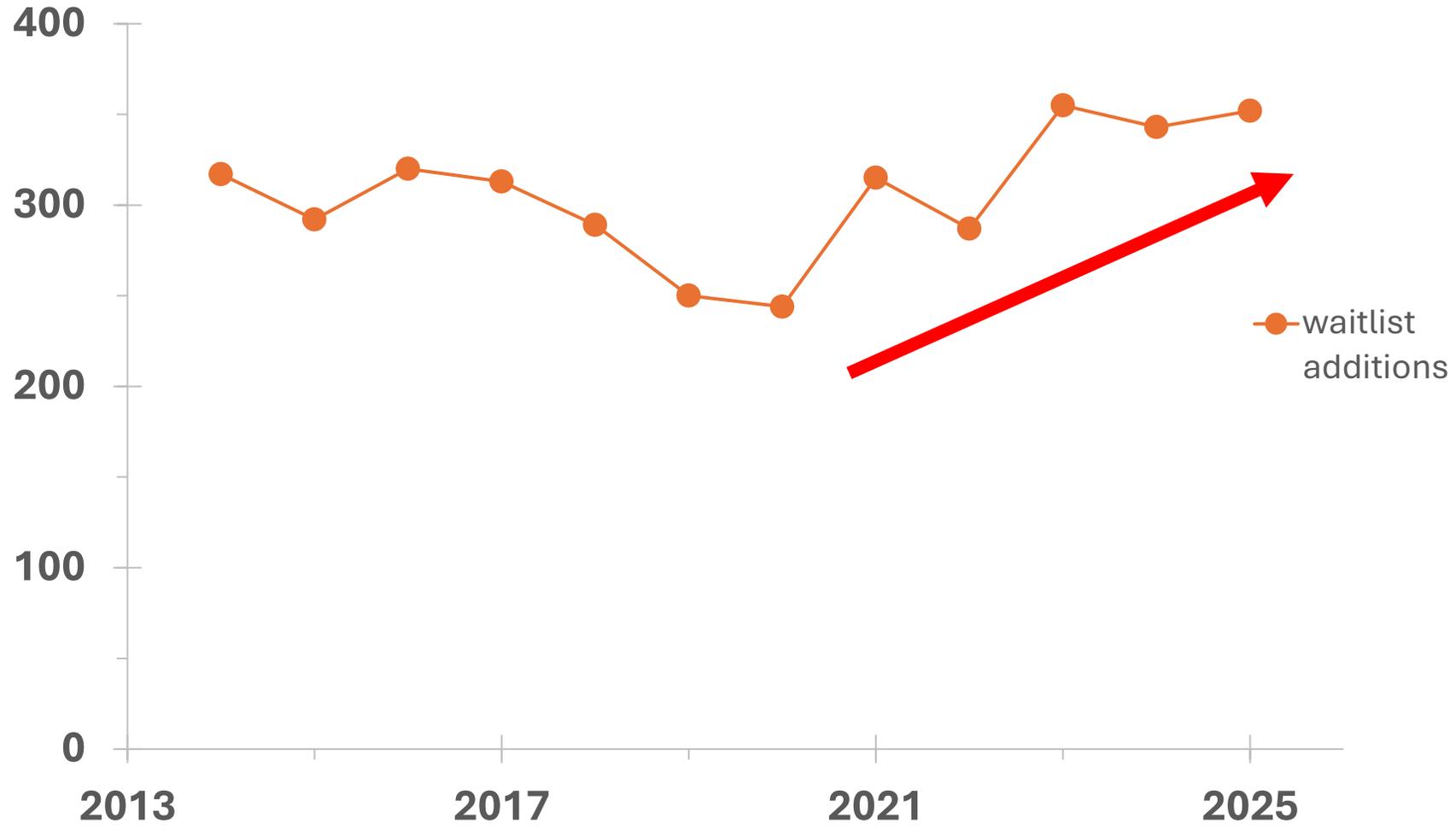
# US Deceased Organ Donors

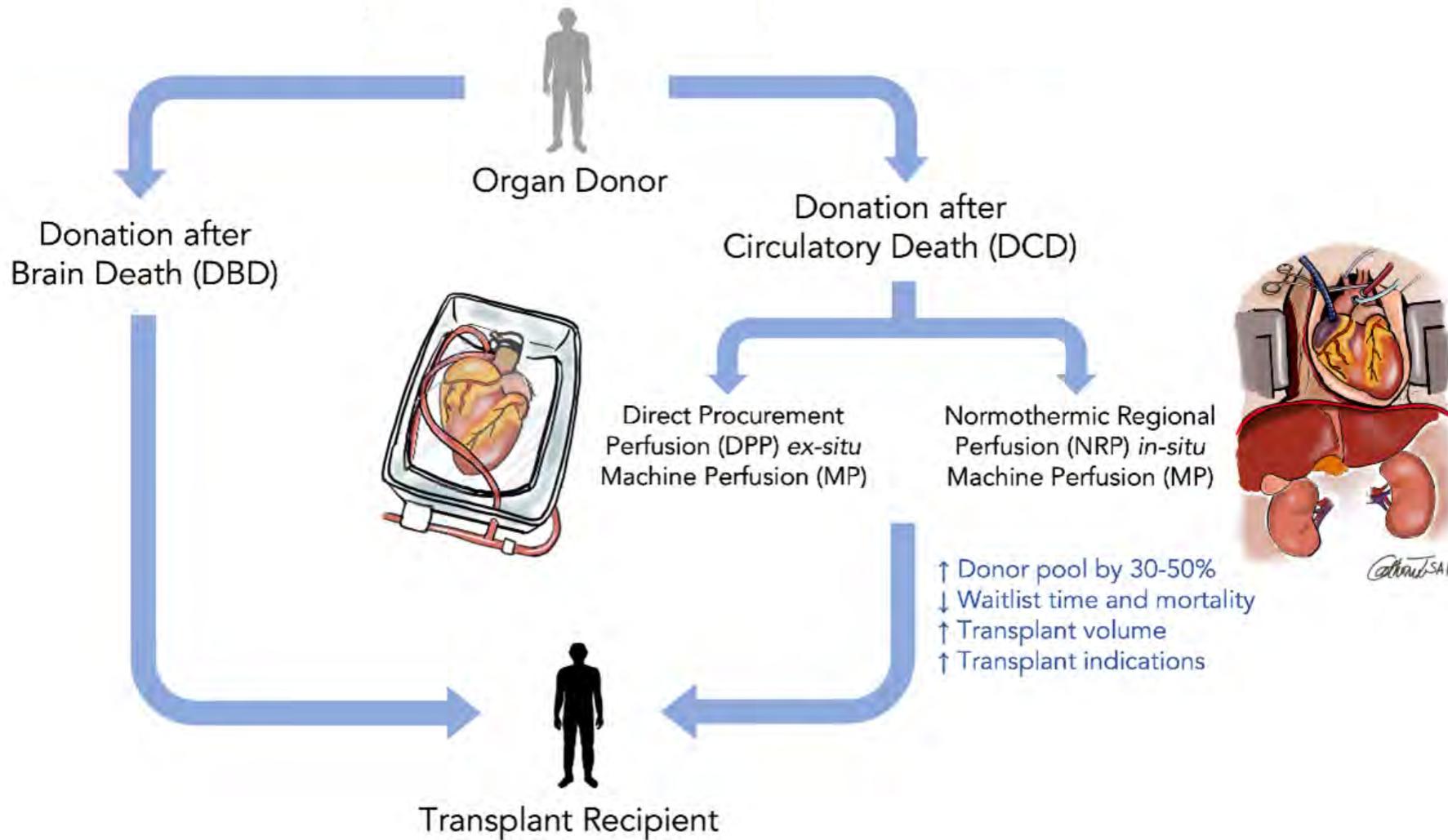


## Patients Added to Liver US Waitlist



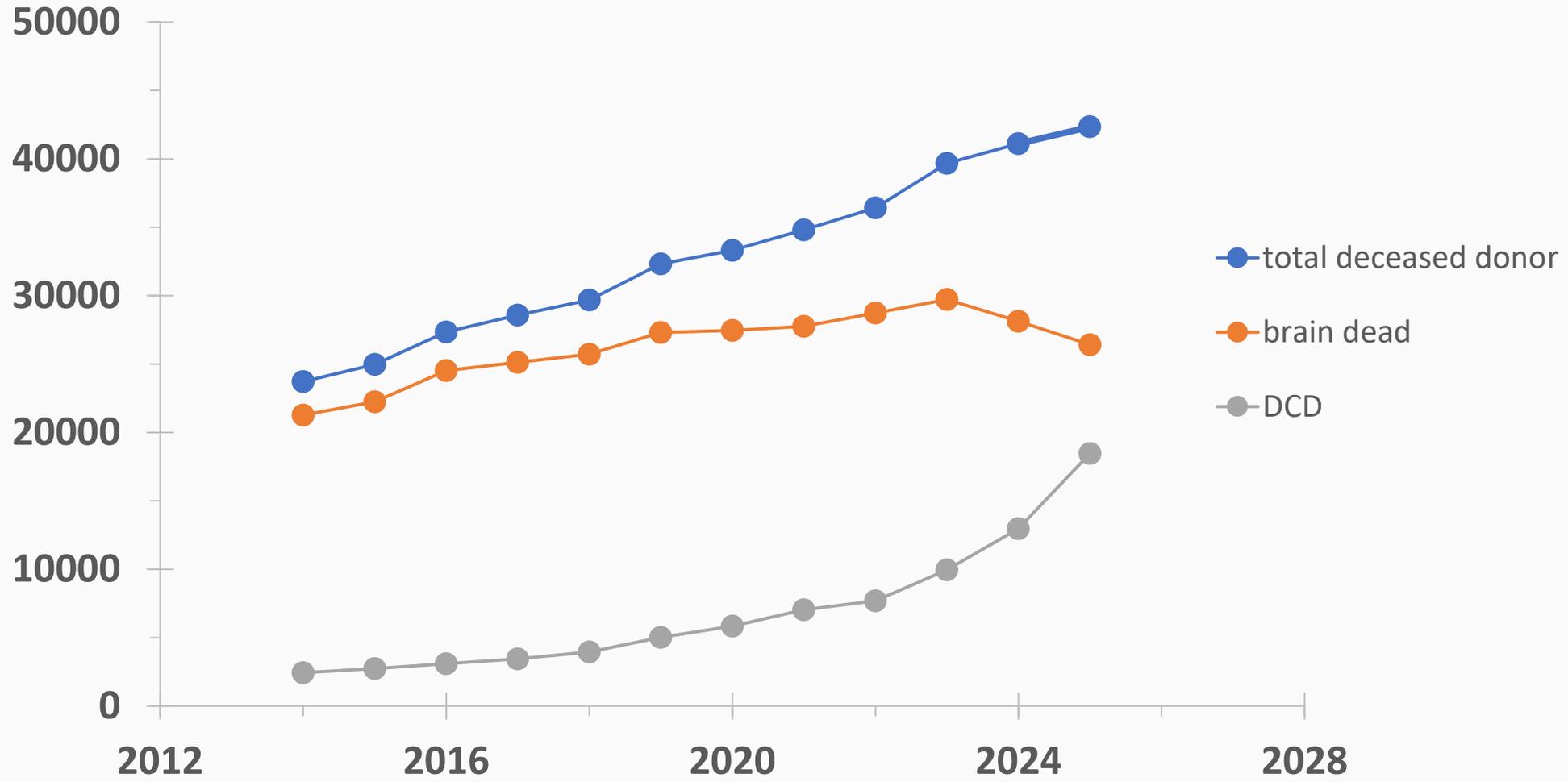
## Patients Added to Liver Waitlist in Minnesota



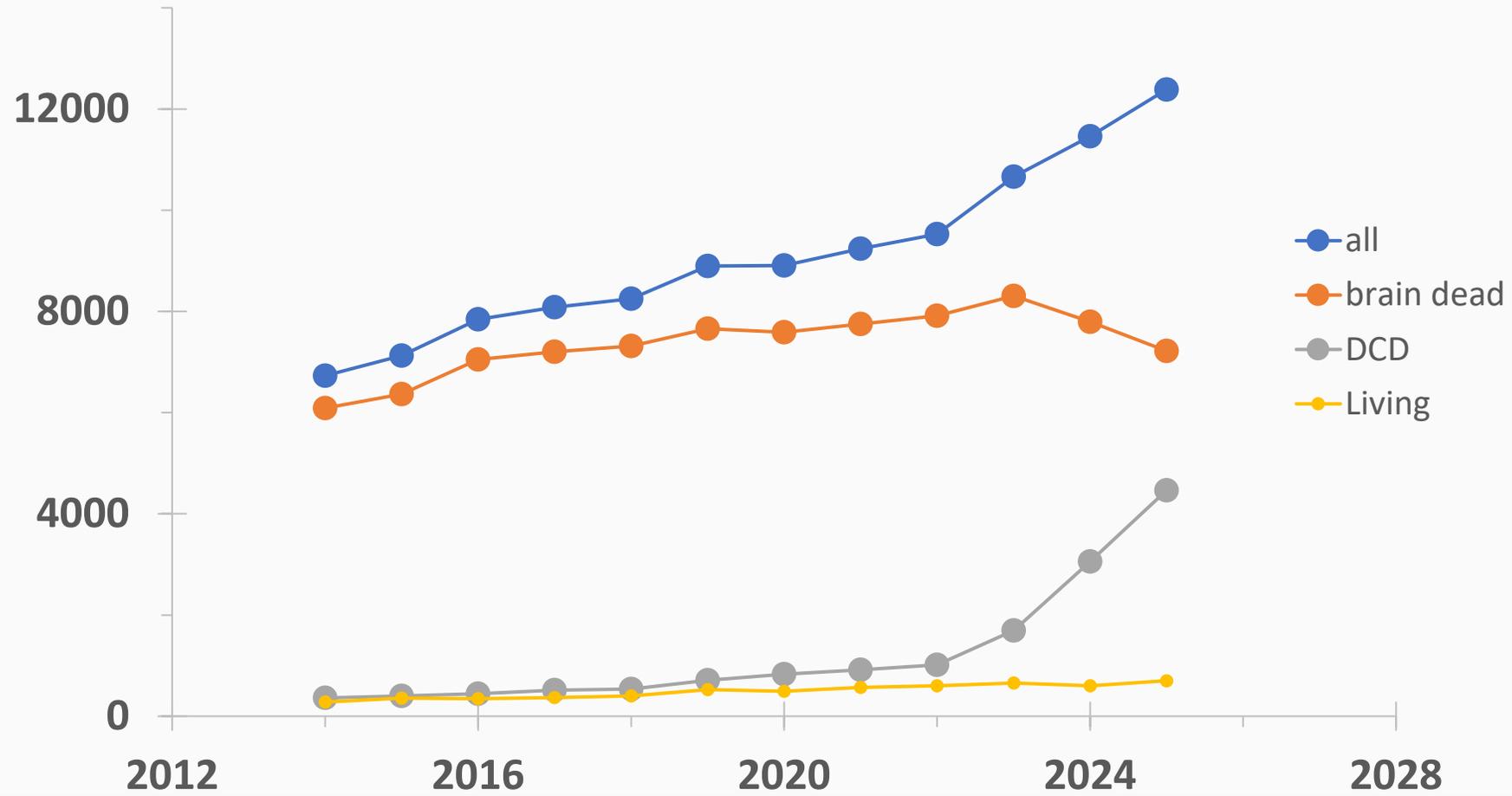


Courtesy of Lee C, Tsai C, Adler E, Pretorius V.

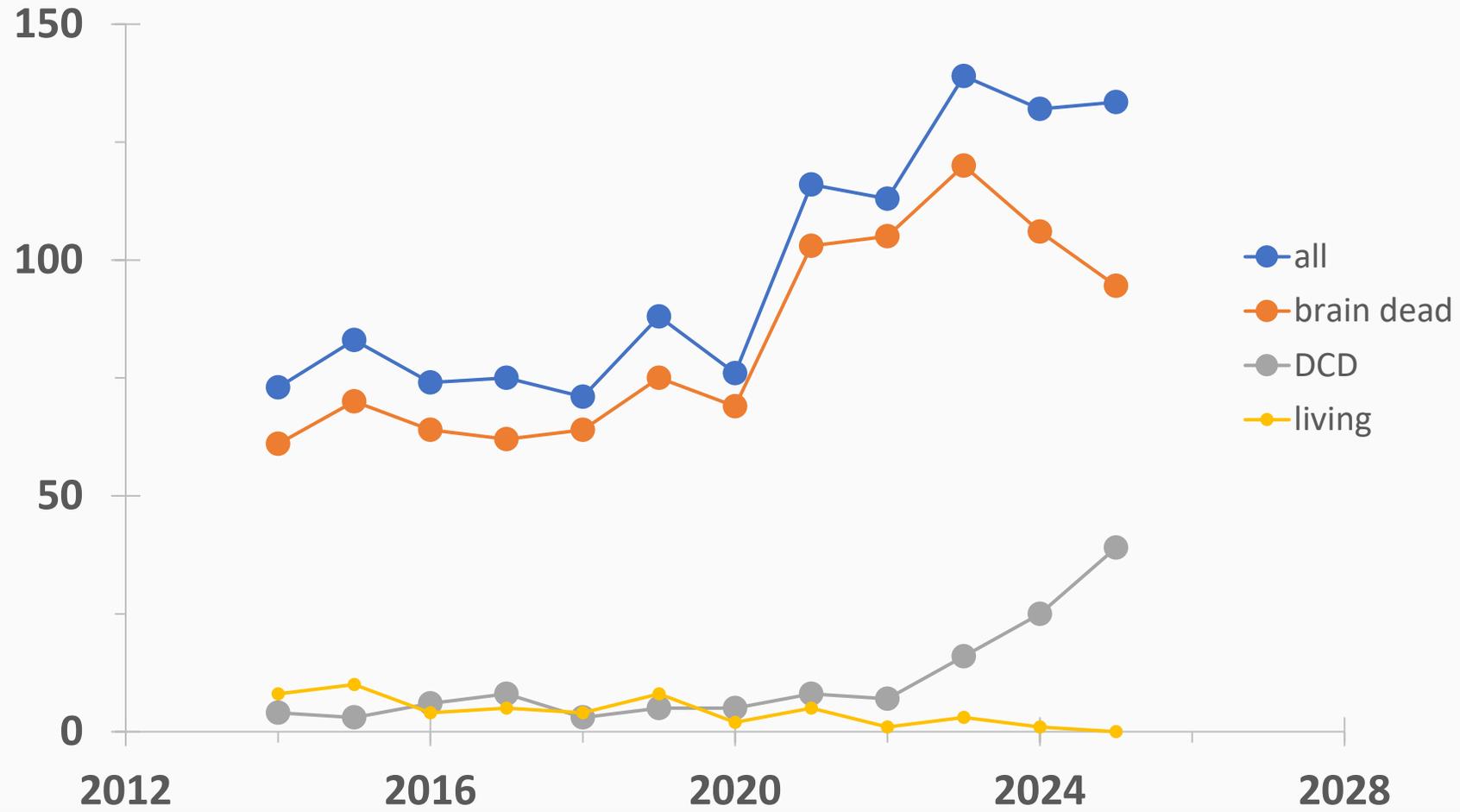
# Deceased Donor Transplants



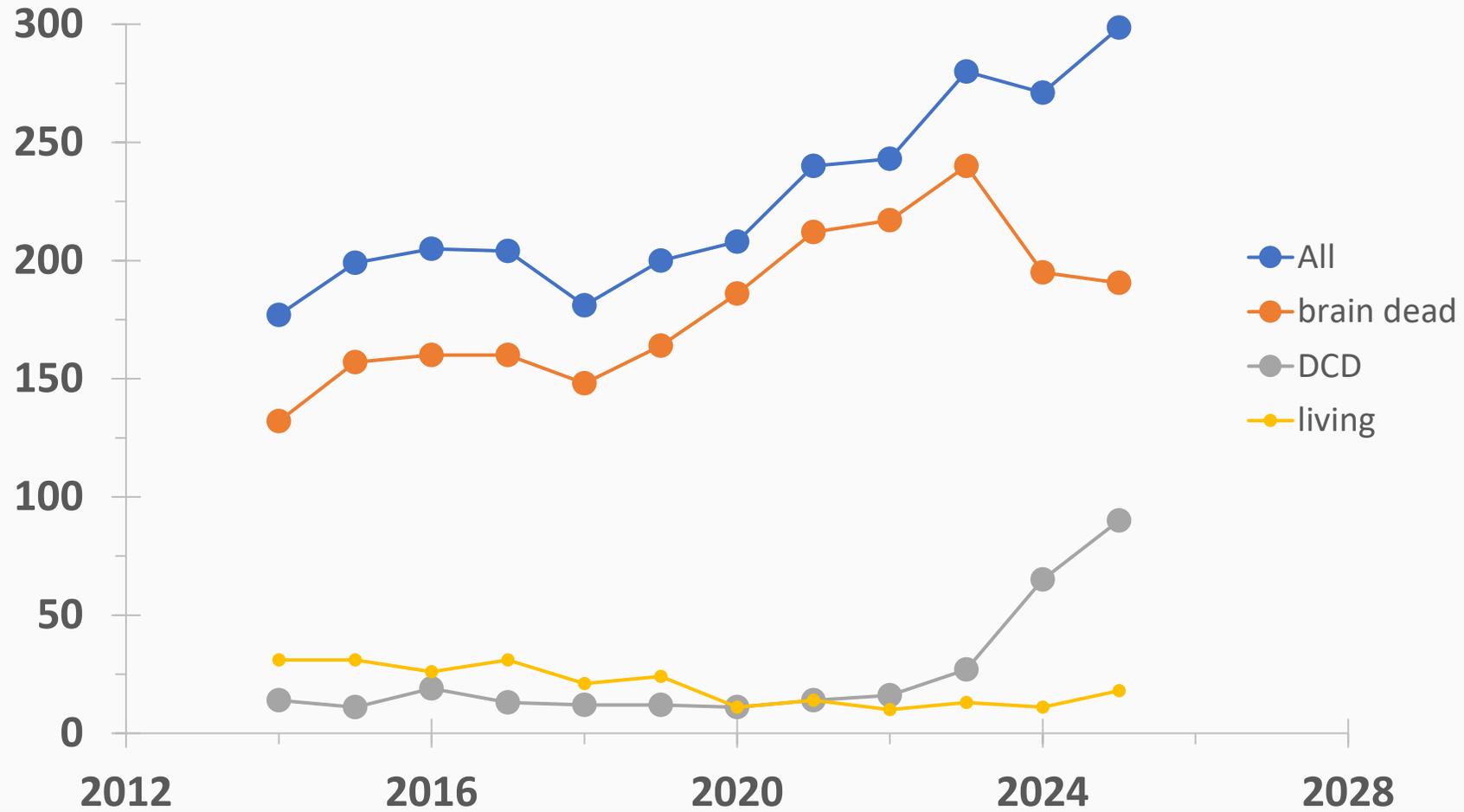
# Liver Transplant- Donor Type



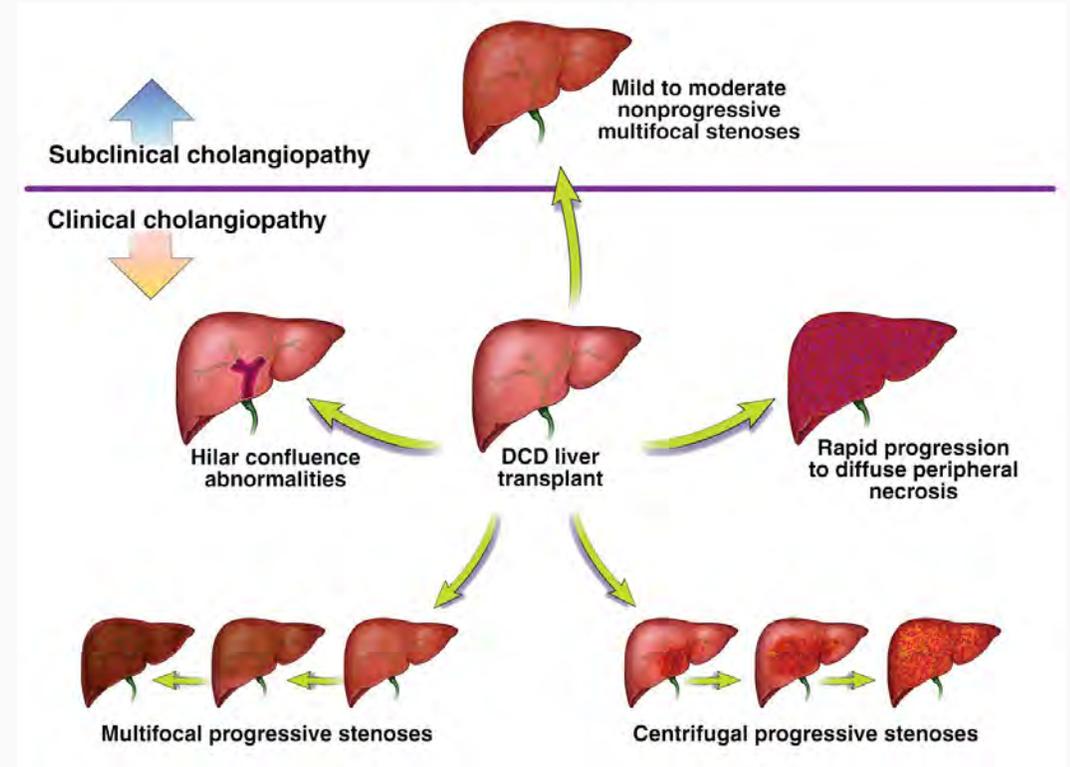
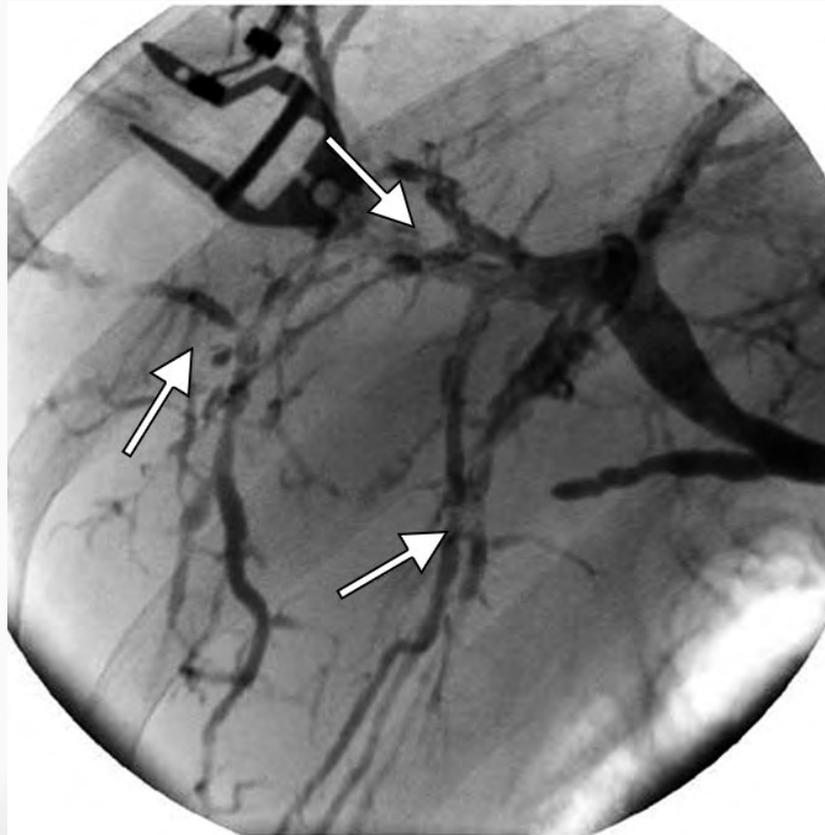
## Liver Transplant UMN- Donor Type



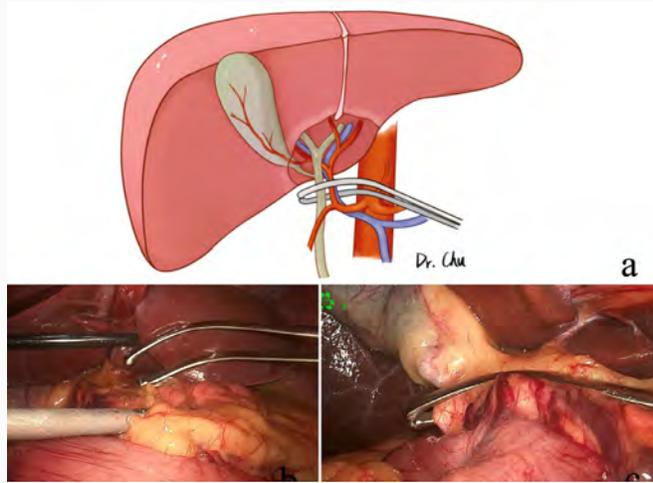
## Liver Transplant State of MN- Donor Type



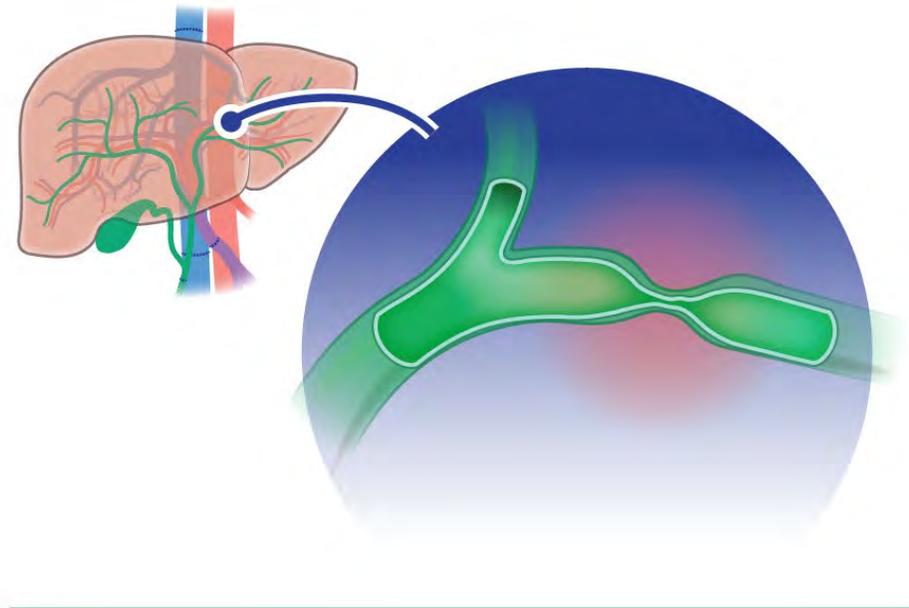
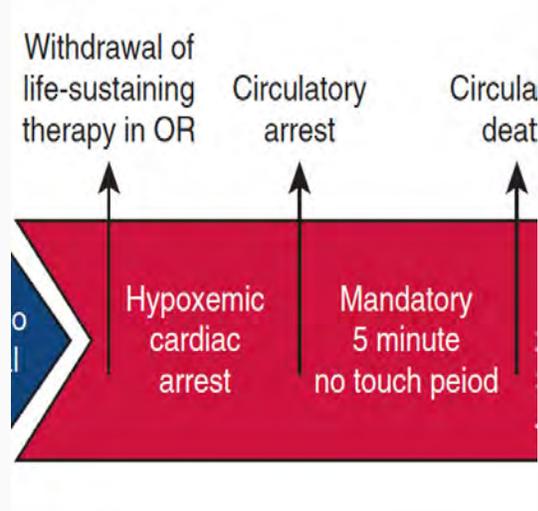
# Achilles Heel of DCD Liver Transplant



<https://doi.org/10.2214/AJR.14.13383>

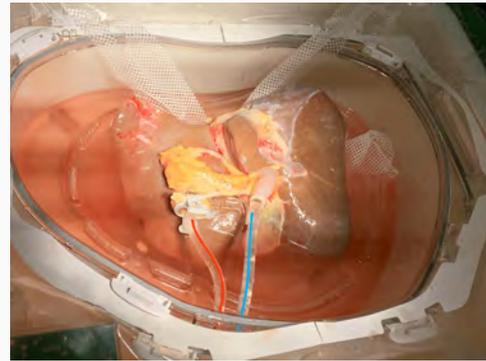


DCD livers =no blood flow or oxygen to the liver/bile ducts



# Liver Perfusion- Normo/Hypothermic

---



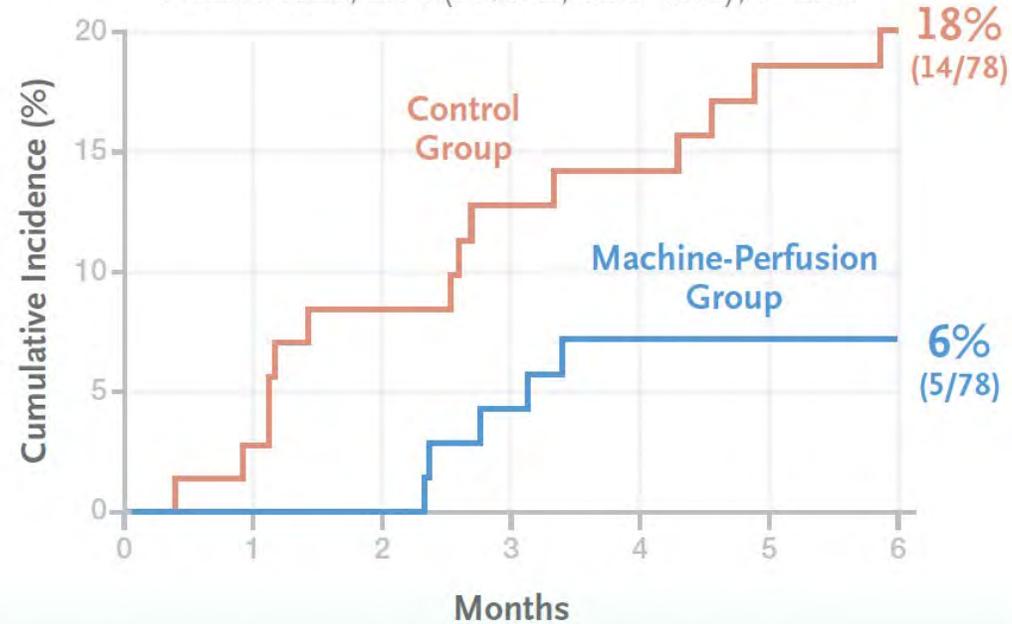
Hypothermic Machine Perfusion in Liver Transplantation  
— A Randomized Trial

R. van Rijn, I.J. Schurink, Y. de Vries, A.P. van den Berg, M. Cortes Cerisuelo, S. Darwish Murad, J.I. Erdmann, N. Gilbo, R.J. de Haas, N. Heaton, B. van Hoek, V.A.L. Huurman, I. Jochmans, O.B. van Leeuwen, V.E. de Meijer, D. Monbaliu, W.G. Polak, J.J.G. Slangen, R.I. Troisi, A. Vanlander, J. de Jonge, and R.J. Porte, for the DHOPE-DCD Trial Investigators\*

N=160 patients

Cumulative Incidence of Symptomatic  
Nonanastomotic Biliary Strictures

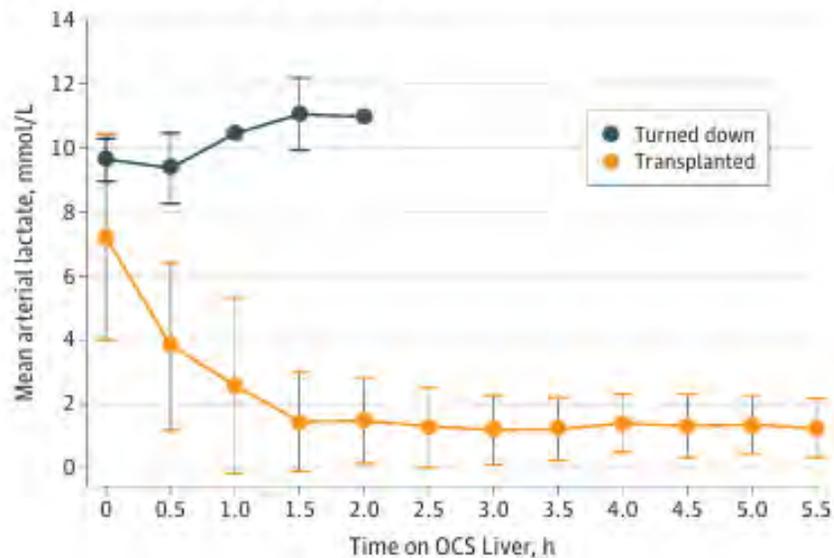
Hazard ratio, 0.32 (95% CI, 0.11–0.89); P=0.03



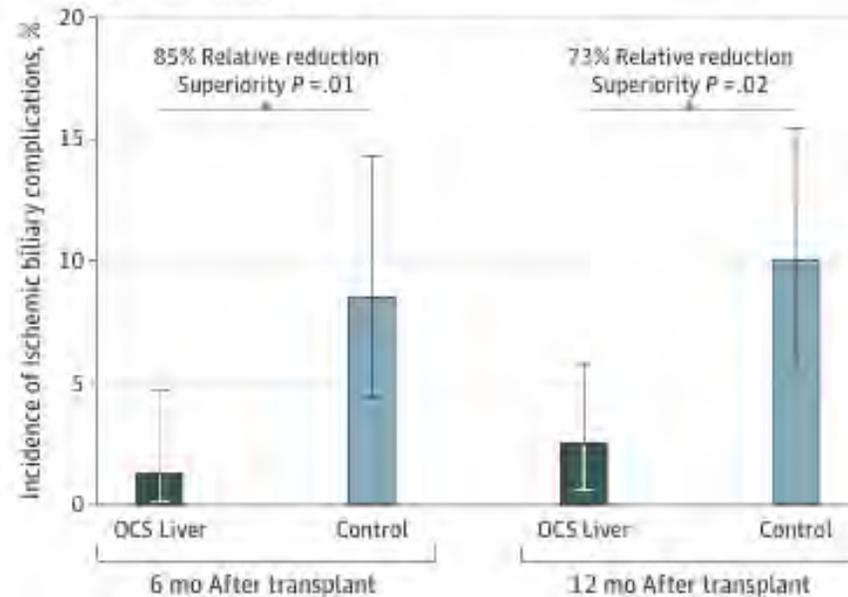
# Impact of Portable Normothermic Blood-Based Machine Perfusion on Outcomes of Liver Transplant

## The OCS Liver PROTECT Randomized Clinical Trial

**B** Lactate levels during OCS Liver perfusion

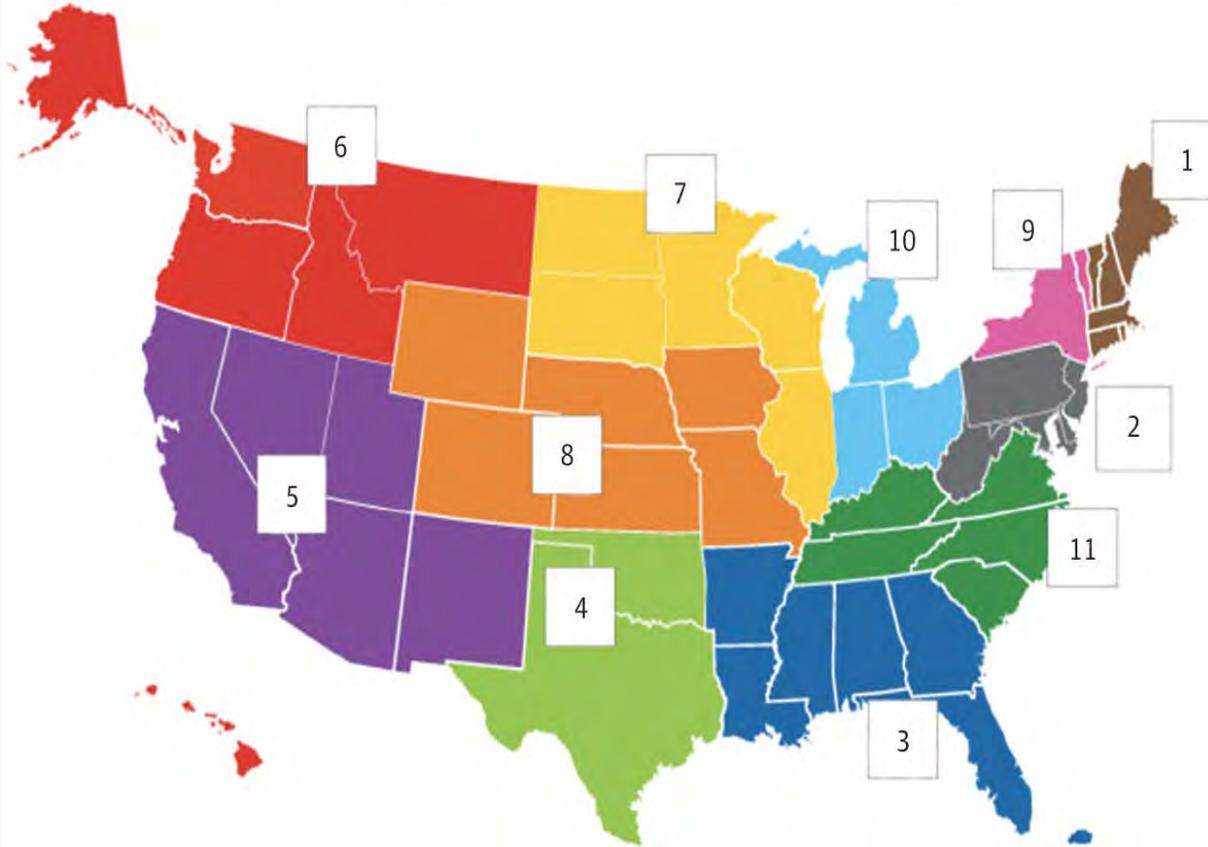


**D** Incidence of ischemic biliary complications in the PROTECT trial in the per-protocol population



# Normothermic Regional Perfusion Experience of Organ Procurement Organizations in the US

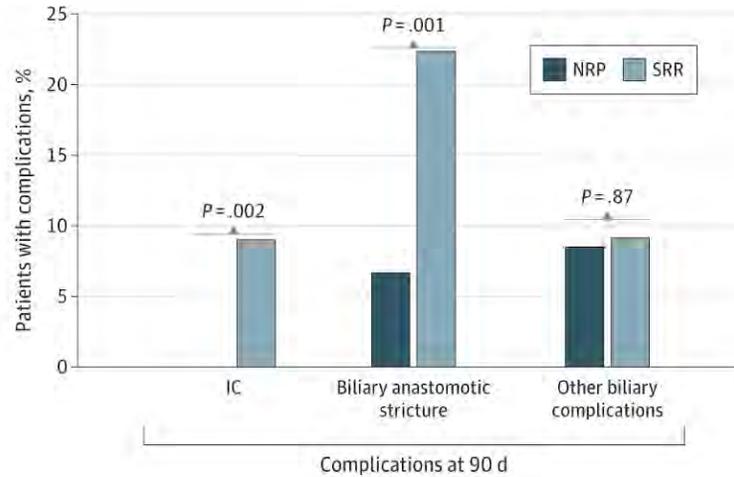
Marty T. Sellers, MD, MPH; Jennifer L. Philip, MD; Aleah L. Brubaker, MD, PhD; Roxane L. Cauwels, MBA; Kristopher P. Croome, MD, MS; Jordan R. Hoffman, MD; Nikole A. Neidlinger, MD, MBA; Andrea M. Reynolds, BFA; Anji E. Wall, MD, PhD; John M. Edwards, RN



Total cases, No.			
OPTN region	TA-NRP (n=421)	A-NRP (n=185)	Total (N=606)
1	0	4	4
2	21	15	36
3	45	75	36
4	59	40	99
5	98	9	107
6	0	0	0
7	12	0	12
8	77	3	80
9	28	9	37
10	33	3	36
11	48	27	75

From: **US Liver Transplant Outcomes After Normothermic Regional Perfusion vs Standard Super Rapid Recovery**

JAMA Surg. 2024;159(6):677-685. doi:10.1001/jamasurg.2024.0520



n= 242 DCD/NRP

Figure Legend:

Ischemic Cholangiopathy and Biliary Complications in Normothermic Regional Perfusion (NRP) Compared With Standard Super Rapid Recovery (SRR) Groups Percentage of recipients with ischemic cholangiopathy (IC), biliary anastomotic stricture, and other biliary complications in the NRP cohort compared with the SRR cohort.

# Survival Benefit of Living-Donor Liver Transplant

Whitney E. Jackson, MD; John S. Malamon, PhD; Bruce Kaplan, MD; Jessica L. Saben, PhD; Jesse D. Schold, PhD; James J. Pomposelli, MD, PhD; Elizabeth A. Pomfret, MD, PhD

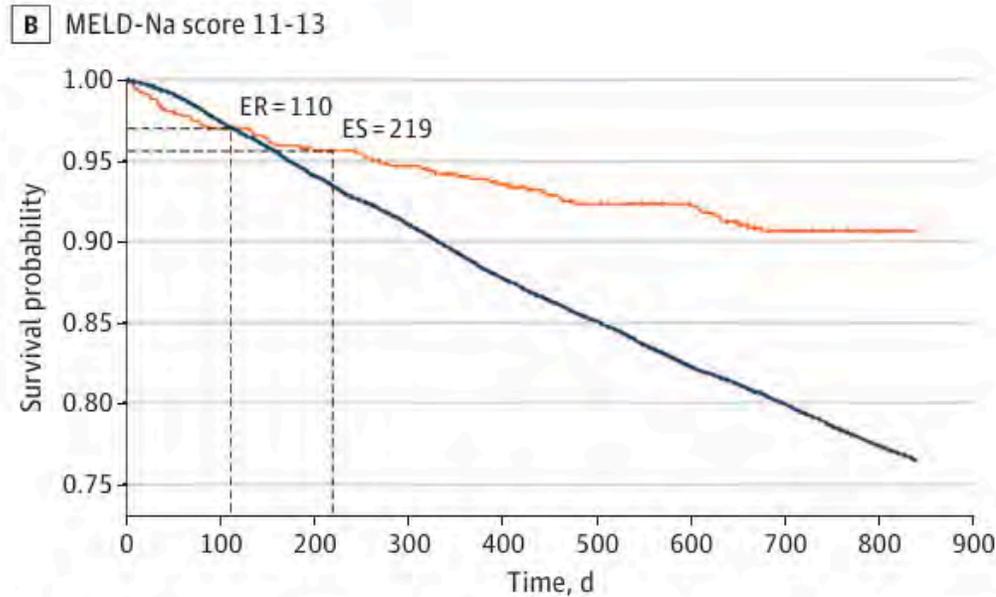
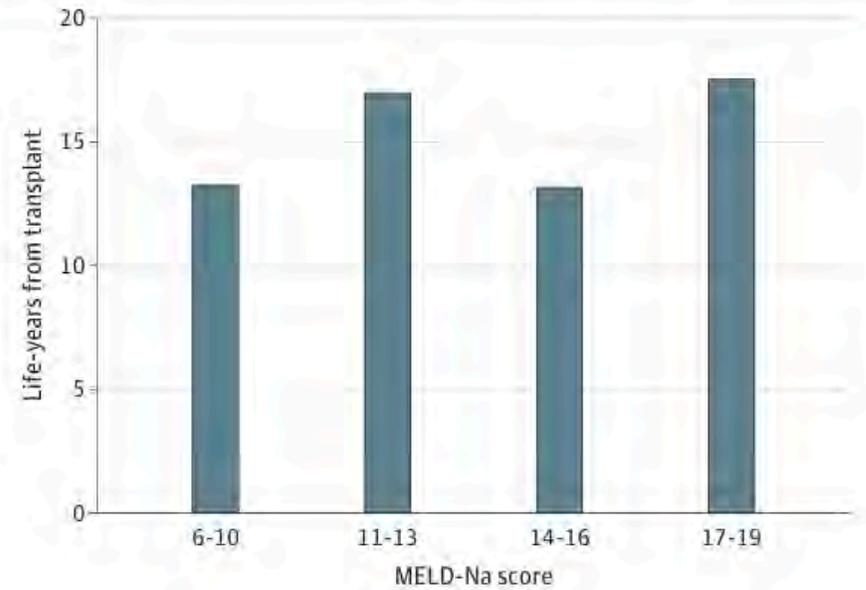


Figure 3. Life-Years Saved After Living-Donor Liver Transplant



# Transplantation for Alcoholic Hepatitis — Time to Rethink the 6-Month “Rule”

Author: Robert S. Brown, Jr., M.D., M.P.H. [Author Info & Affiliations](#)

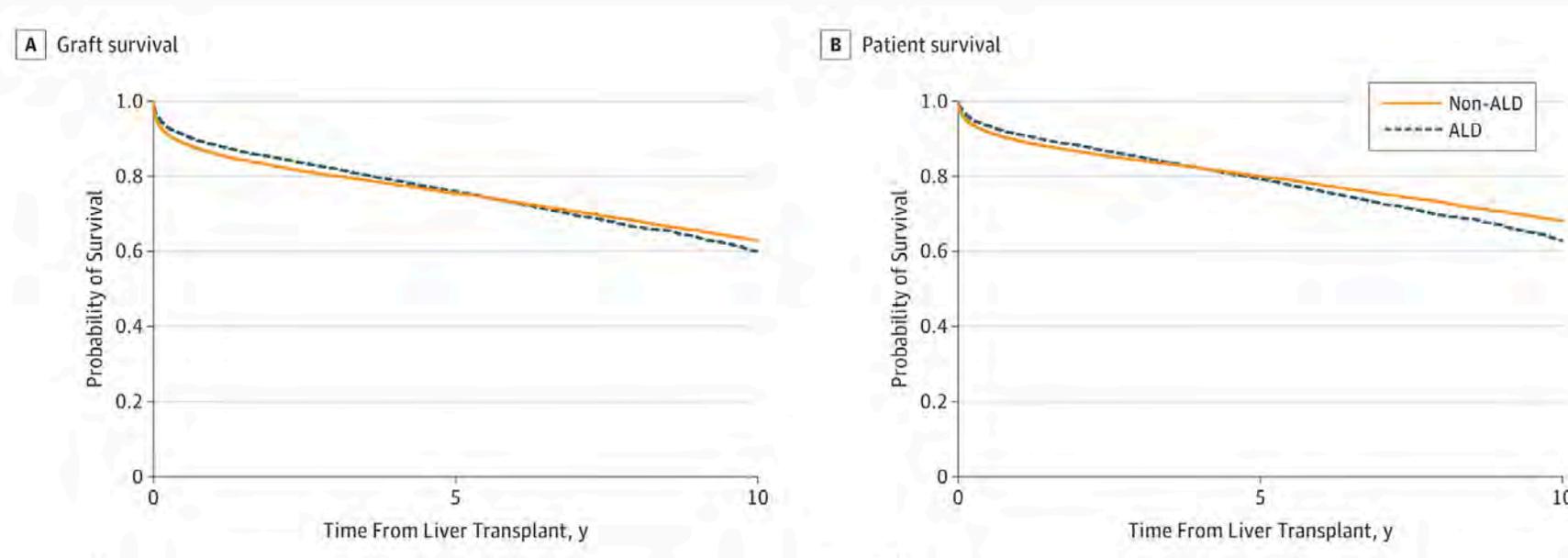
Published November 10, 2011 | N Engl J Med 2011;365:1836-1838 | DOI: 10.1056/NEJMe1110864

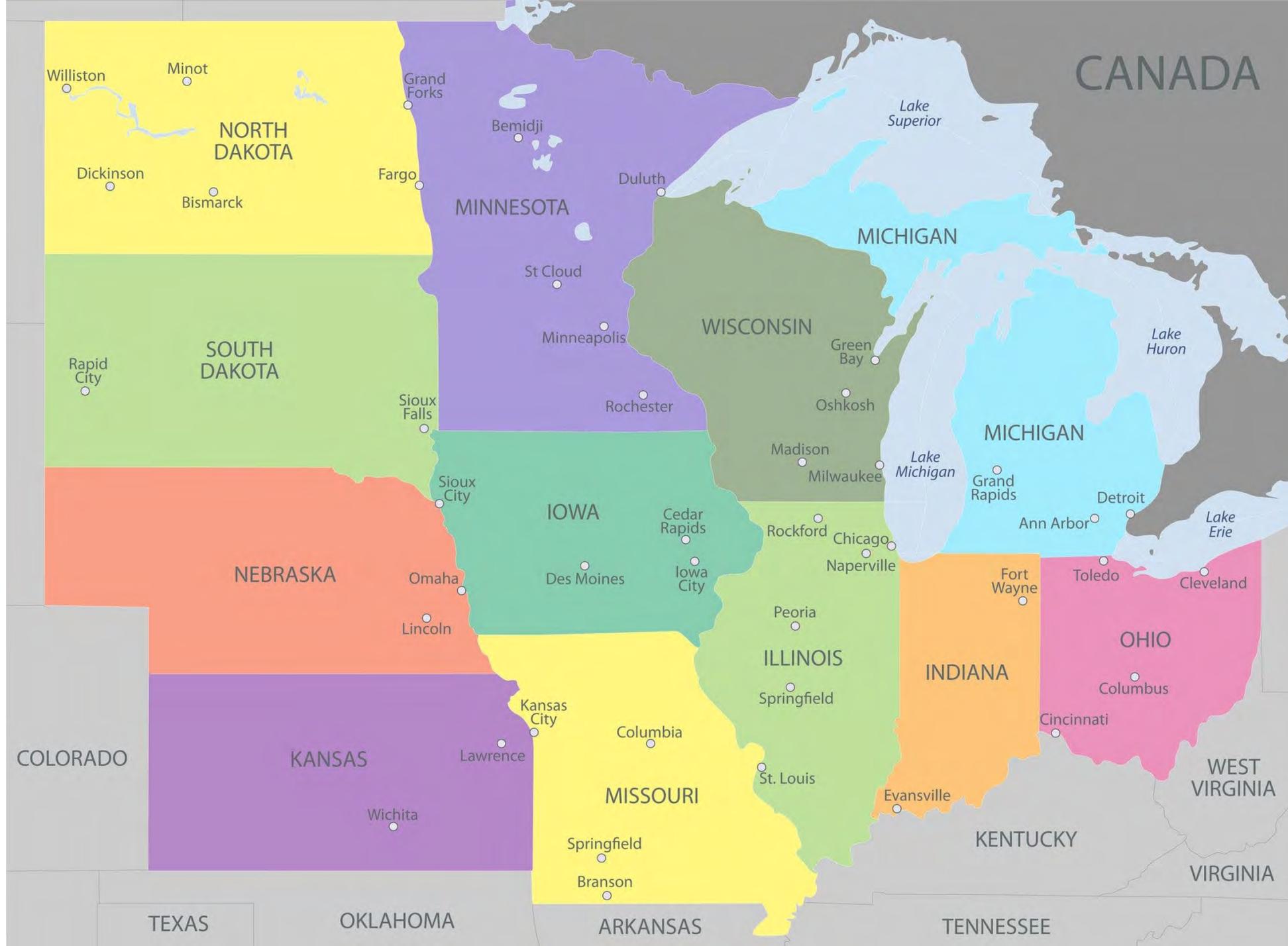
VOL. 365 NO. 19 | Copyright © 2011

JAMA Internal Medicine | [Original Investigation](#)

## National Trends and Long-term Outcomes of Liver Transplant for Alcohol-Associated Liver Disease in the United States

Brian P. Lee, MD; Eric Vittinghoff, PhD; Jennifer L. Dodge, MPH; Giuseppe Cullaro, MD; Norah A. Terrault, MD





	DISTANCE	DECEASED DONOR TRANSPLANTS IN A YEAR	LIVING DONOR TRANSPLANTS IN A YEAR	SURVIVAL ON THE WAITLIST	GETTING A DECEASED DONOR TRANSPLANT FASTER <sup>i</sup>	1-YEAR LIVER SURVIVAL
--	----------	--------------------------------------	------------------------------------	--------------------------	---	-----------------------

**University of Minnesota Medical Center, Fairview**  
 Minneapolis, MN  
 Report: [PDF](#) | [Interactive](#)  


20.3 miles

120  
ADULTS

1  
ADULTS



**Mayo Clinic Hospital Minnesota**  
 Rochester, MN  
 Report: [PDF](#) | [Interactive](#)

76.7 miles

125  
ADULTS

10  
ADULTS



**University of Wisconsin Hospital and Clinics**  
 Madison, WI  
 Report: [PDF](#) | [Interactive](#)

218.1 miles

104  
ADULTS

5  
ADULTS



**Avera McKennan Hospital**  
 Sioux Falls, SD  
 Report: [PDF](#) | [Interactive](#)

219.3 miles

0  
ADULTS

0  
ADULTS



**University of Iowa Hospitals and Clinics Transplant Programs**  
 Iowa City, IA  
 Report: [PDF](#) | [Interactive](#)

243.9 miles

9  
ADULTS

0  
ADULTS





# Significantly Better Outcomes than Expected in Minnesota

Figure C5. Adult (18+) 1-year graft failure HR estimate

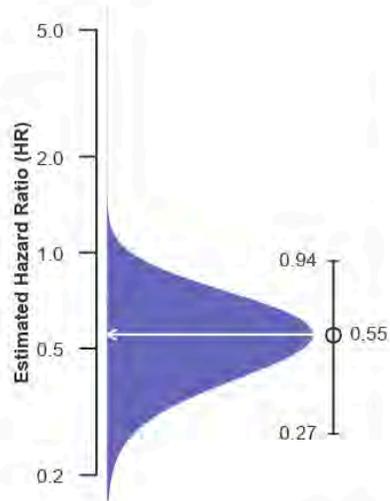


Figure C6. Adult (18+) 1-year graft failure HR program comparison

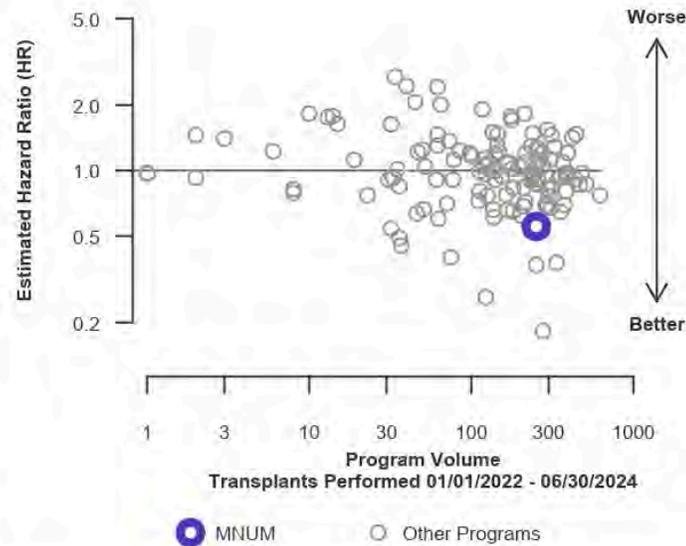


Figure C5. Adult (18+) 1-year graft failure HR estimate

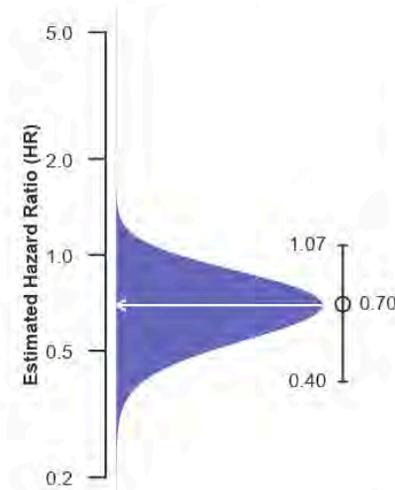
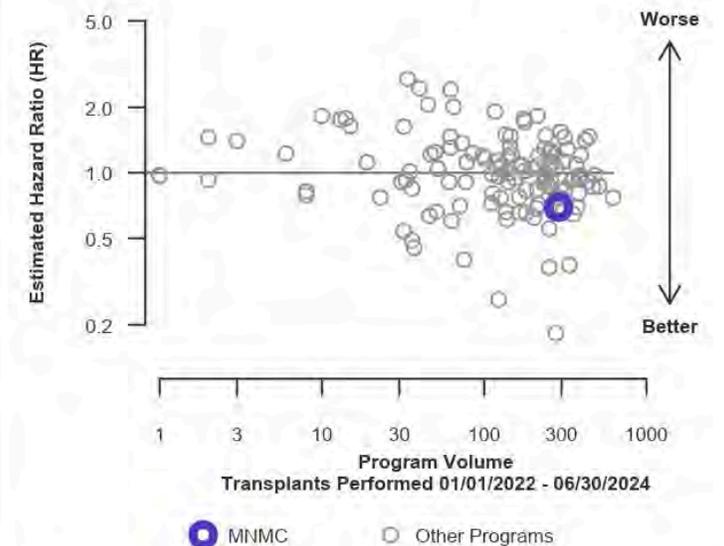


Figure C6. Adult (18+) 1-year graft failure HR program comparison



# Aggressive Acceptance Practices

Figure B10. Offer acceptance: Overall

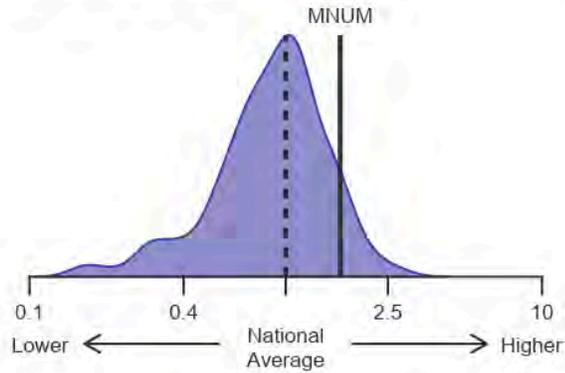


Figure B10. Offer acceptance: Overall

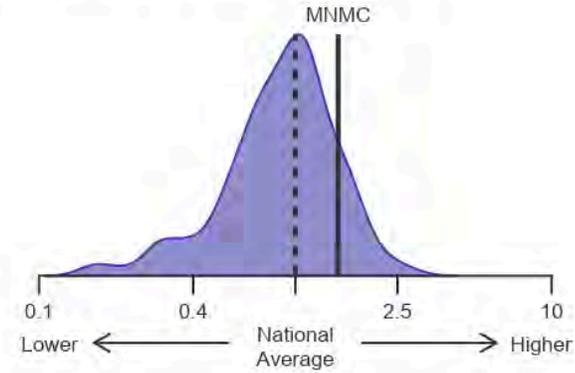


Figure B12. Offer acceptance: DCD Donor

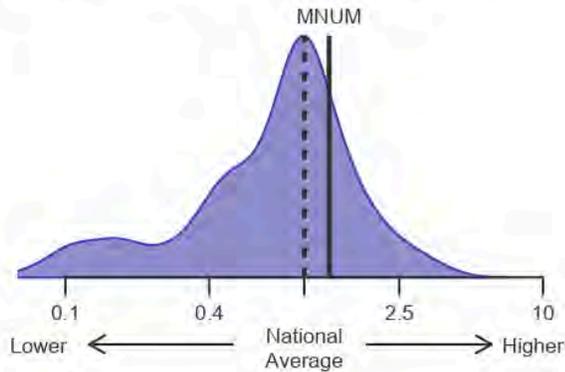
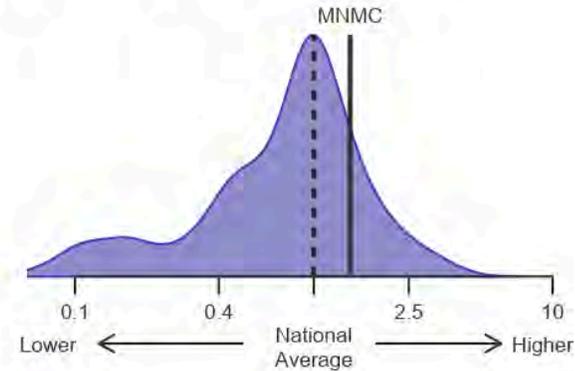


Figure B12. Offer acceptance: DCD Donor



# Conclusions

---

- Not just about increasing numbers
- Team effort
- Expanding indications
- Adopting disruptive innovation
- Ensuring excellent outcomes





# MAYO CLINIC HEART AND TRANSPLANT



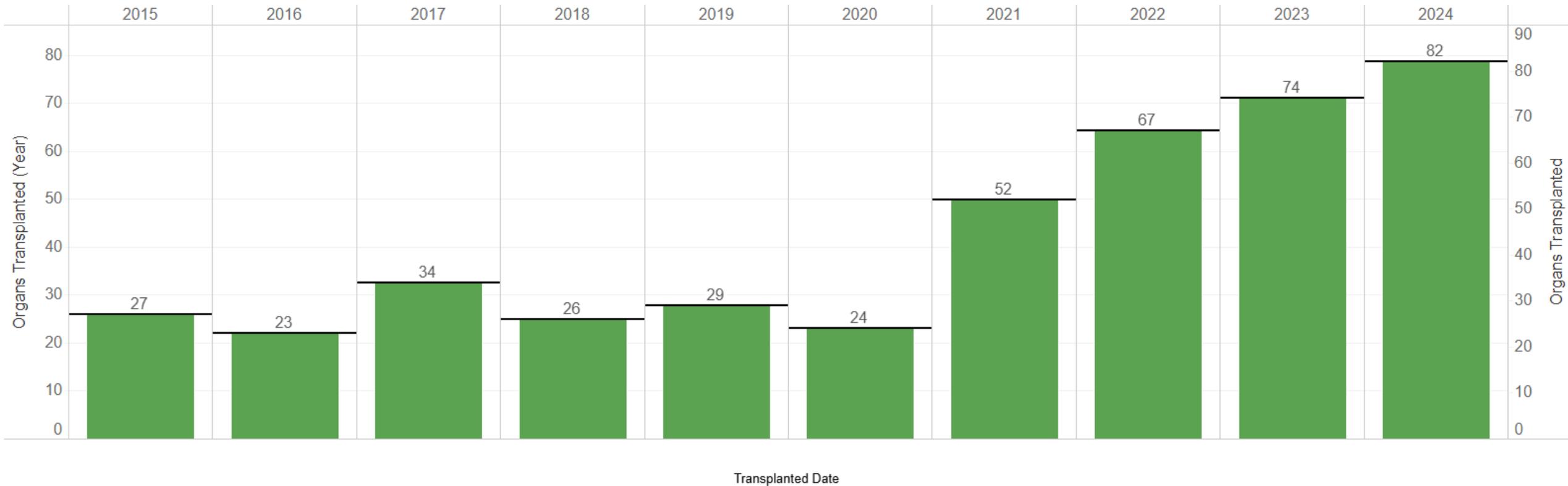
**Alfredo Clavell, MD**  
Medical Director  
Heart Transplant



**Mauricio Villavicencio, MD**  
Surgical Director  
Heart & Lung Transplant

# HEART TRANSPLANT GROWTH

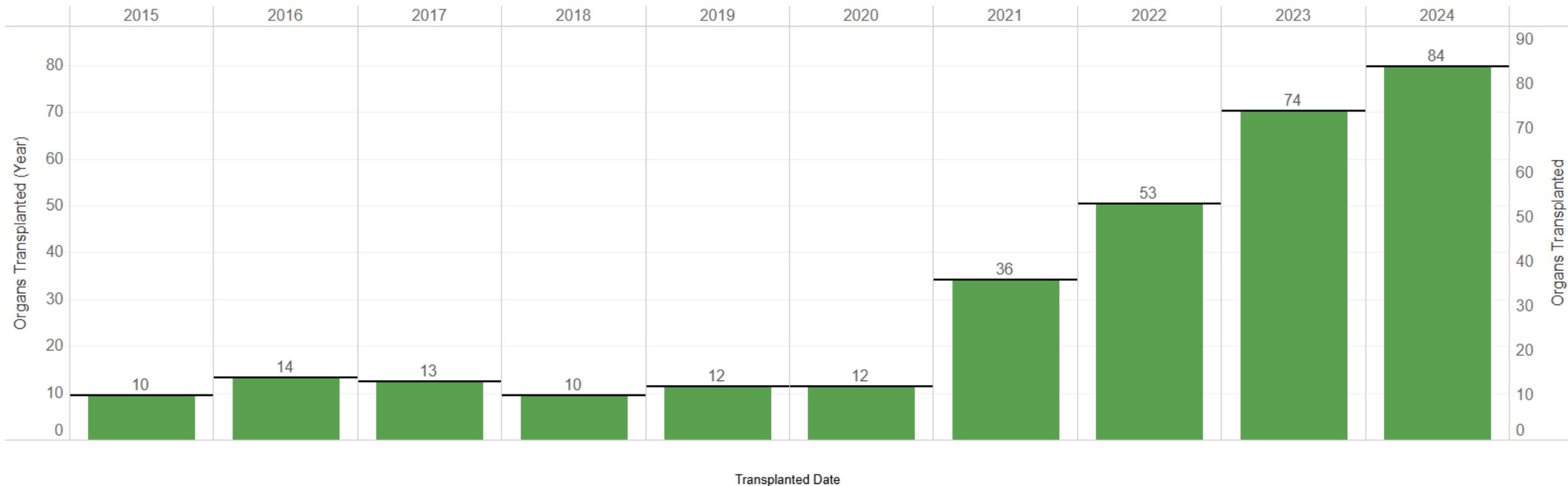
Transplants Completed



Cumulative Growth Rate 2020-24: **241.67%**  
Average Annual Growth Rate 2020-24: **35.96%**

# LUNG TRANSPLANT GROWTH

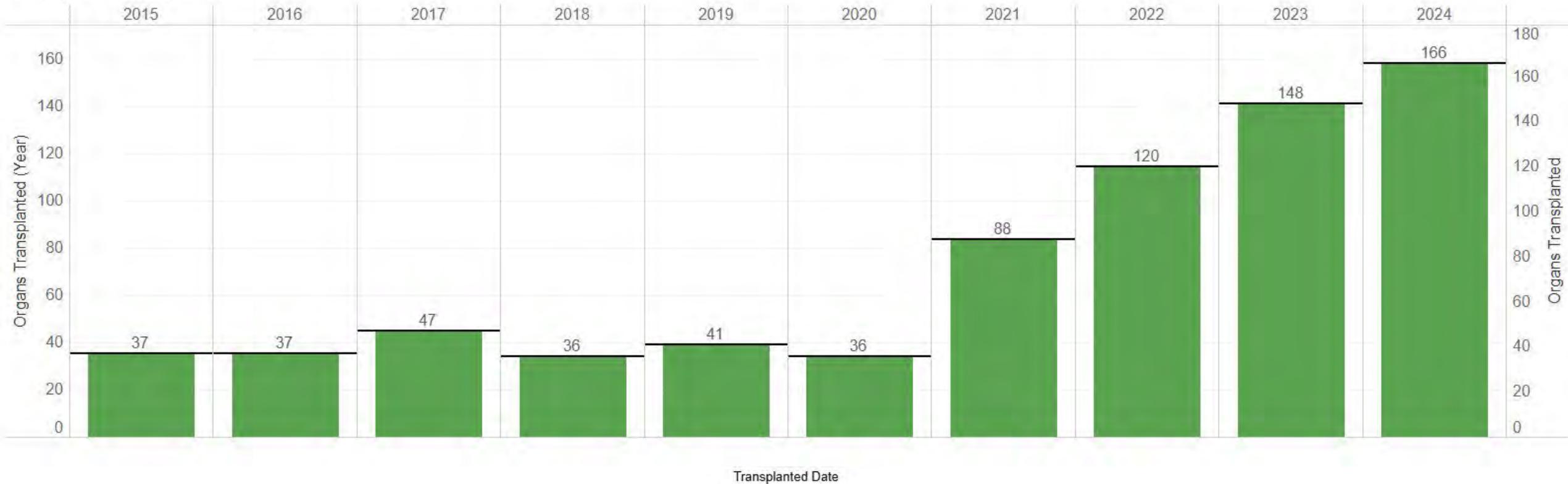
Transplants Completed



Cumulative Growth Rate 2020-24: **600.00%**  
Average Annual Growth Rate 2020-24: **62.66%**

# HEART & LUNG TRANSPLANT COMBINED GROWTH

Transplants Completed



Cumulative Growth Rate 2020-24: **361.11%**  
Average Annual Growth Rate 2020-24: **46.54%**

# TRANSPLANT GROWTH

- Celebrating 1,056 transplants Heart Transplant and 574 Lung Transplants and counting: lives saved and donor legacies celebrated
- Anticipate some volume fluctuation from year to year, with vision to perform more than 100 hearts and 100 lungs per year
- Prioritize transformative contributions in research and education in the field

# KEY FACTORS IN GROWTH: TECHNICAL

- Broad Listing
- Hepatitis C donors
- Normothermic regional perfusion (NRP)
- Ex vivo heart perfusion (OCS heart device)
- DCD heart transplantation
- Aggressive acute circulatory support
- Extended criteria donors
- Aggressive recipient listing
- Mind open to multiorgan transplants

24/7 year-round real clinical coverage

# KEY FACTORS IN GROWTH: TECHNICAL SINGLE MOST IMPORTANT BROAD LISTING

Minimum acceptable donor age:	14 Years
Maximum acceptable donor age:	60 Years
Maximum acceptable donor height:	
Minimum acceptable donor weight:	70 kg
Maximum acceptable donor weight:	260 kg
Donor gender requirements:	Either
Accept DCD donor?	Yes

## Medical and Social History

Accept a donor with a history of coronary artery disease?	Yes
---	-----

## Infectious Diseases

Accept a Hepatitis B Core antibody positive donor?	No
Accept an HBV NAT positive donor?	No
Accept an HCV antibody positive donor?	Yes
Accept an HCV NAT positive donor?	Yes

## Recovery

Maximum nautical miles the organ or recovery team will travel:	2500 NM
--	---------

# KEY FACTORS IN GROWTH: TECHNICAL HEPATITIS C LISTING

Pre-emptive pangenotypic direct acting antiviral therapy in donor HCV-positive to recipient HCV-negative heart transplantation: an open-label study



Lancet Gastroenterol Hepatol  
2019; 4: 771-80

*Emily D Bethea, Kerry Gaj, Jenna L Gustafson, Andrea Axtell, Taylor Lebeis, Mark Schoenike, Karen Turvey, Erin Coglianese, Sunu Thomas, Christopher Newton-Cheh, Nasrien Ibrahim, William Carlson, Jennifer E Ho, Ravi Shah, Matthew Naylor, Thais Gift, Sarah Shao, Amanda Dugal, James Markmann, Nahel Elias, Heidi Yeh, Karin Andersson, Daniel Pratt, Irun Bhan, Kassem Safa, Jay Fishman, Camille Kotton, Paul Myoung, Mauricio A Villavicencio, David D'Alessandro, Raymond T Chung\*, Gregory D Lewis\**

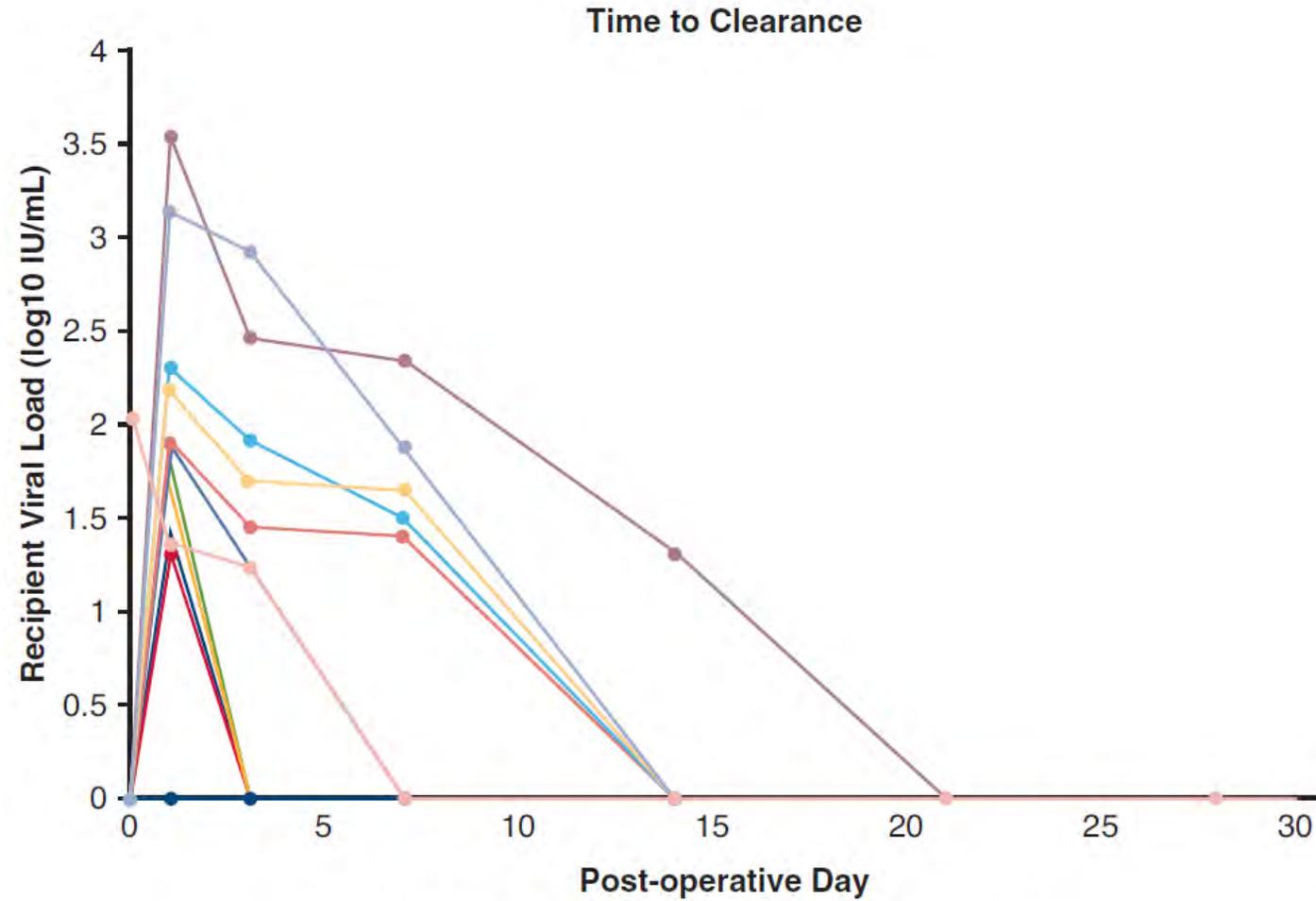
Villavicencio et al

Transplantation

Preemptive antiviral therapy in lung transplantation from hepatitis C donors results in a rapid and sustained virologic response

(JTCVS Open 2023; ■:1-13)

Mauricio A. Villavicencio, MD,<sup>a</sup> Selena S. Li, MD,<sup>b</sup> Ann Marie Leifer, NP,<sup>b</sup> Jenna L. Gustafson, RN,<sup>c</sup> Asishana Osho, MD,<sup>b</sup> Stanley Wolfe, MD,<sup>b</sup> Yuval Raz, MD,<sup>d</sup> Jason Griffith, MD, PhD,<sup>d</sup> Isabel Neuringer, MD,<sup>d</sup> Emily Bethea, MD,<sup>c</sup> Thais Gift, RPh,<sup>e</sup> Georgina Waldman, RPh,<sup>e</sup> Todd Astor, MD,<sup>d</sup> Nathaniel B. Langer, MD,<sup>b</sup> and Raymond T. Chung, MD<sup>c</sup>



**FIGURE 1.** Hepatitis C viral load after transplantation.

**Heads up: Hepatitis B protocol is coming!**

# KEY FACTORS IN GROWTH TECHNICAL NORMOTHERMIC REGIONAL PERFUSION (NRP)

January 2024 • Volume 70 • Number 1 ISSN 1058-2916

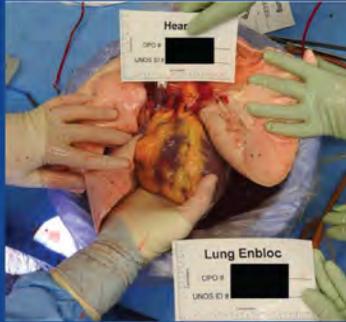
Full Text  
OVID 2022 Impact Factor\*: 4.2

# ASAIO

## Journal

[www.asaijournal.com](http://www.asaijournal.com)

The Official Publication of the  
American Society for Artificial Internal Organs



Heart-lung block following donation after circulatory death procurement (left). Cooler used for allograft transport (right; Igloo®, Texas). See Spencer PJ et al, pp e13-e15

\* Source: Journal Citation Reports™  
2023 from Clarivate™

Published for the Society by  Wolters Kluwer

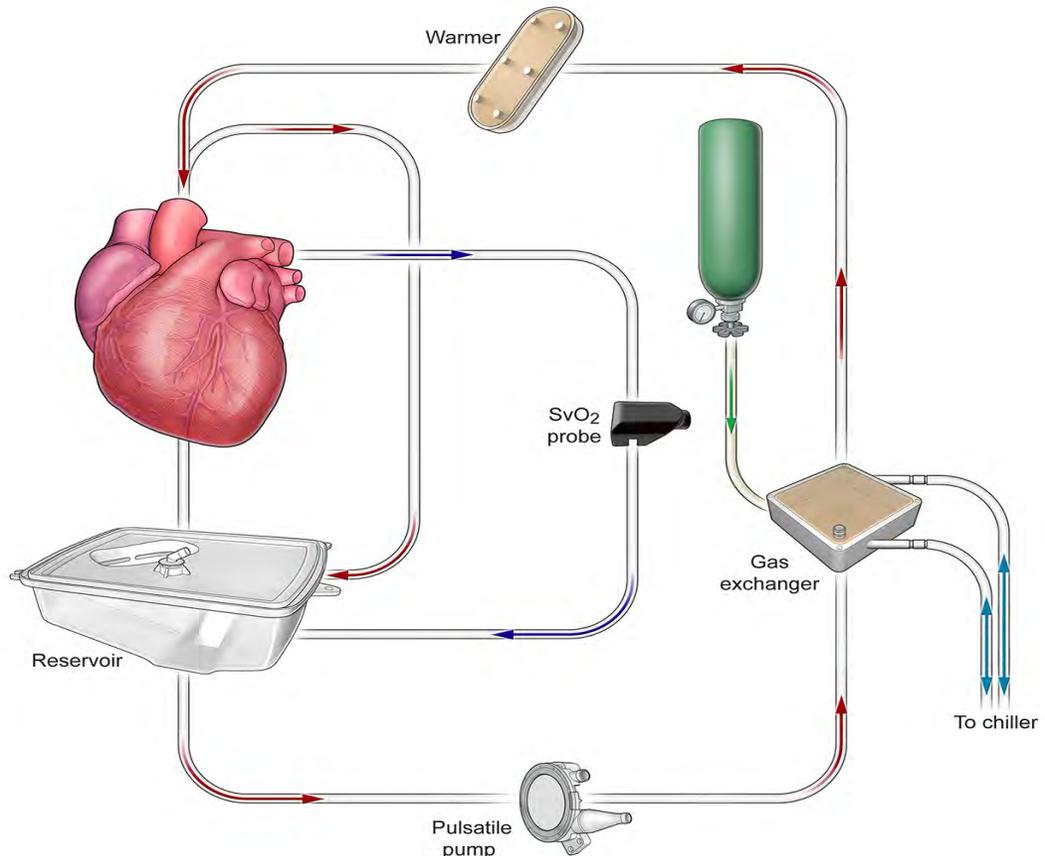
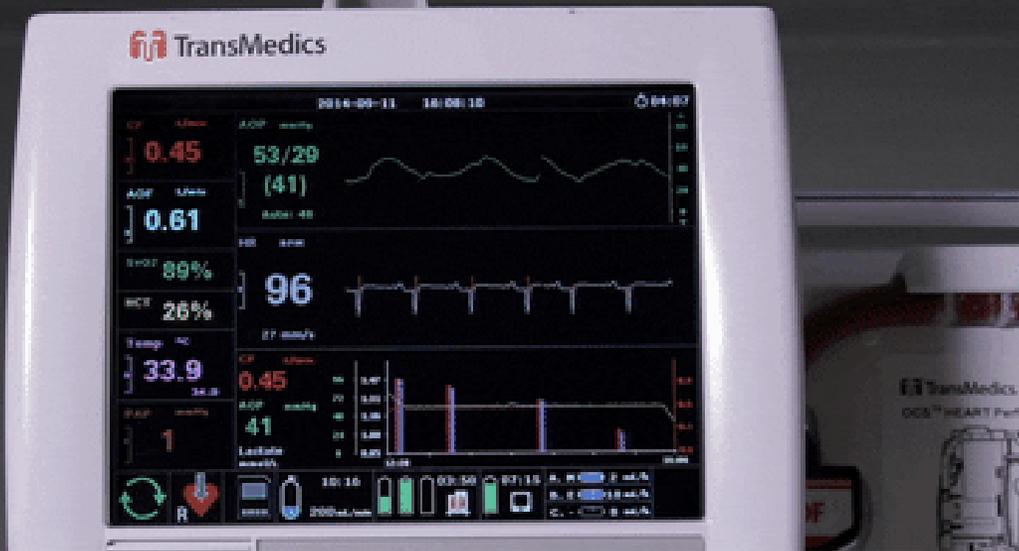
**KEY FACTORS IN GROWTH:  
TECHNICAL EX VIVO HEART PERFUSION (OCS HEART)**

**LONG DISTANCE DONORS > 2500 NM**

**COMPLEX REDO HEART TX: CONGENITALS 3 OR MORE  
STERNOTOMIES**

**DCD**

**MILD HYPERTROPHY**



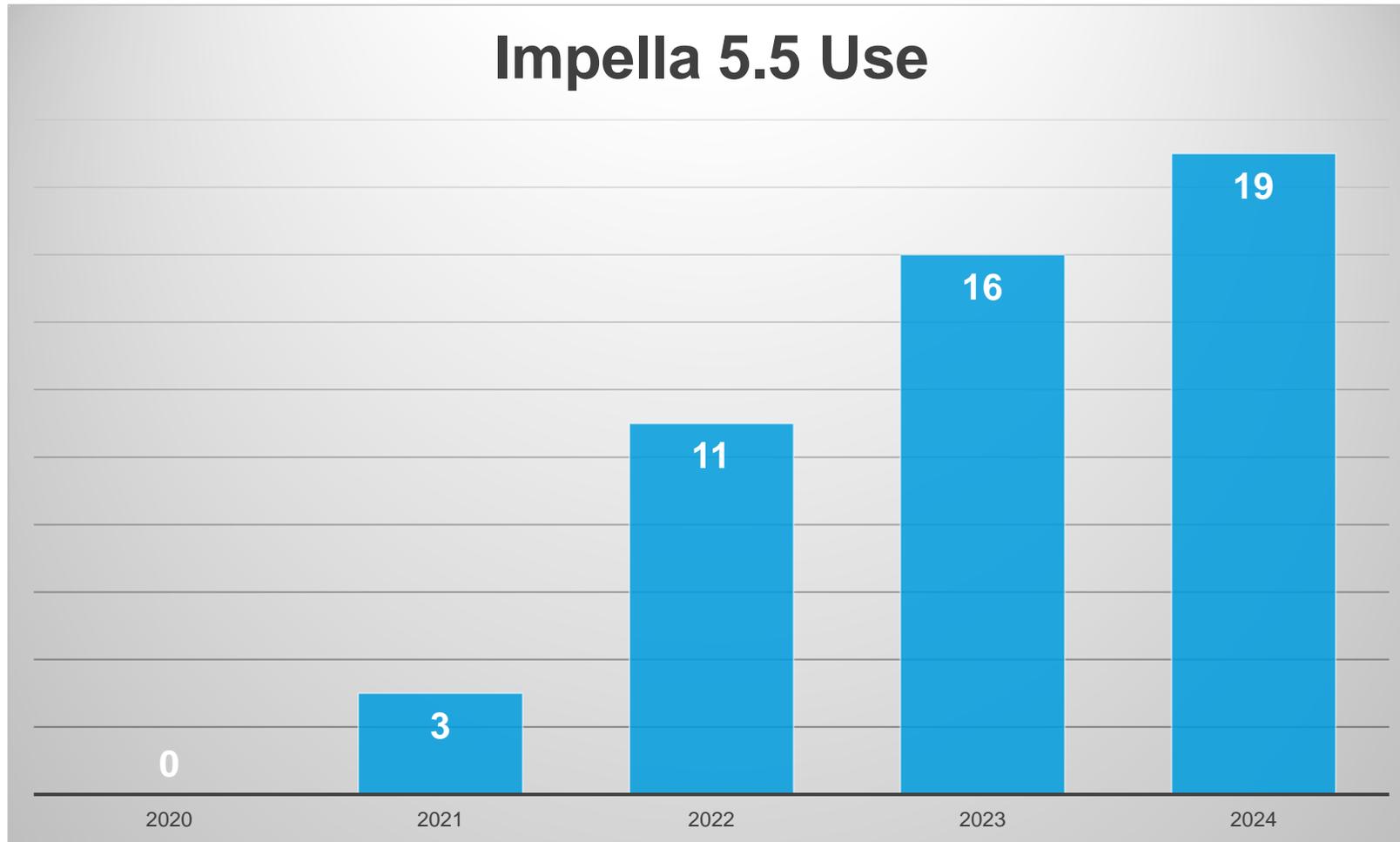
# KEY FACTORS IN GROWTH: TECHNICAL DCD HEART TRANSPLANTATION

Intensive care team: withdrawal of life support

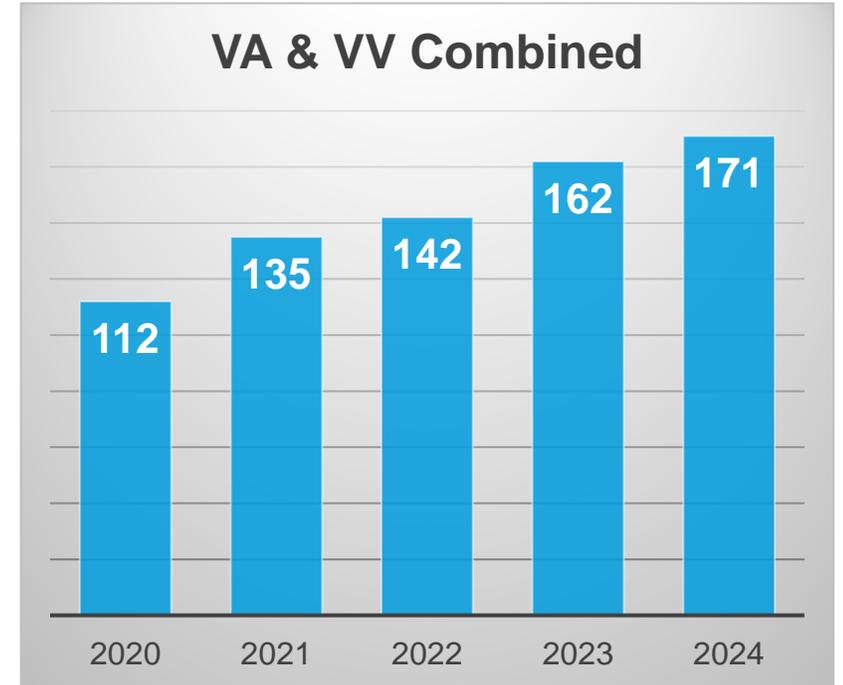
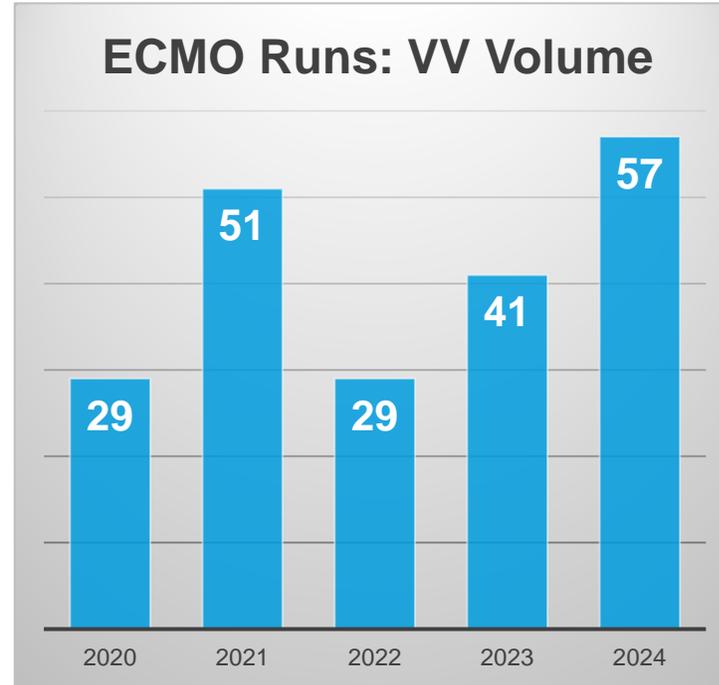
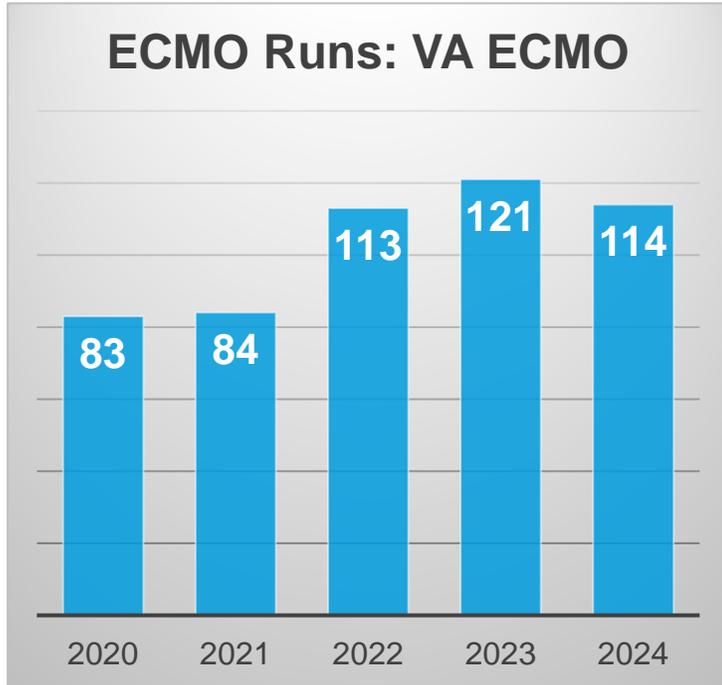
Palliative care team: comfort care

Transplant team: heart, lung, liver, kidney

# KEY FACTORS IN GROWTH: ACUTE CIRCULATORY SUPPORT: IMPELLA 5.5



# KEY FACTORS IN GROWTH: ACUTE CIRCULATORY SUPPORT



## KEY FACTORS IN GROWTH:

**AGGRESSIVE RECIPIENT LISTING AND MIND OPEN TO  
COMBINED ORGANS**

# VA ECMO BTT

41 y.o. male, non-ischemic cardiomyopathy, Becker's muscular dystrophy

- Admitted elsewhere for cardiogenic shock.
- BiPella device were placed, significant hemolysis
- RIJ Protek Duo which was complicated by pulmonary edema and hemorrhage.
- Central VA ECMO and an Impella 5.5. CRRT. Multiple washouts.

Arrived at Mayo Clinic Rochester, MN. Tracheostomy

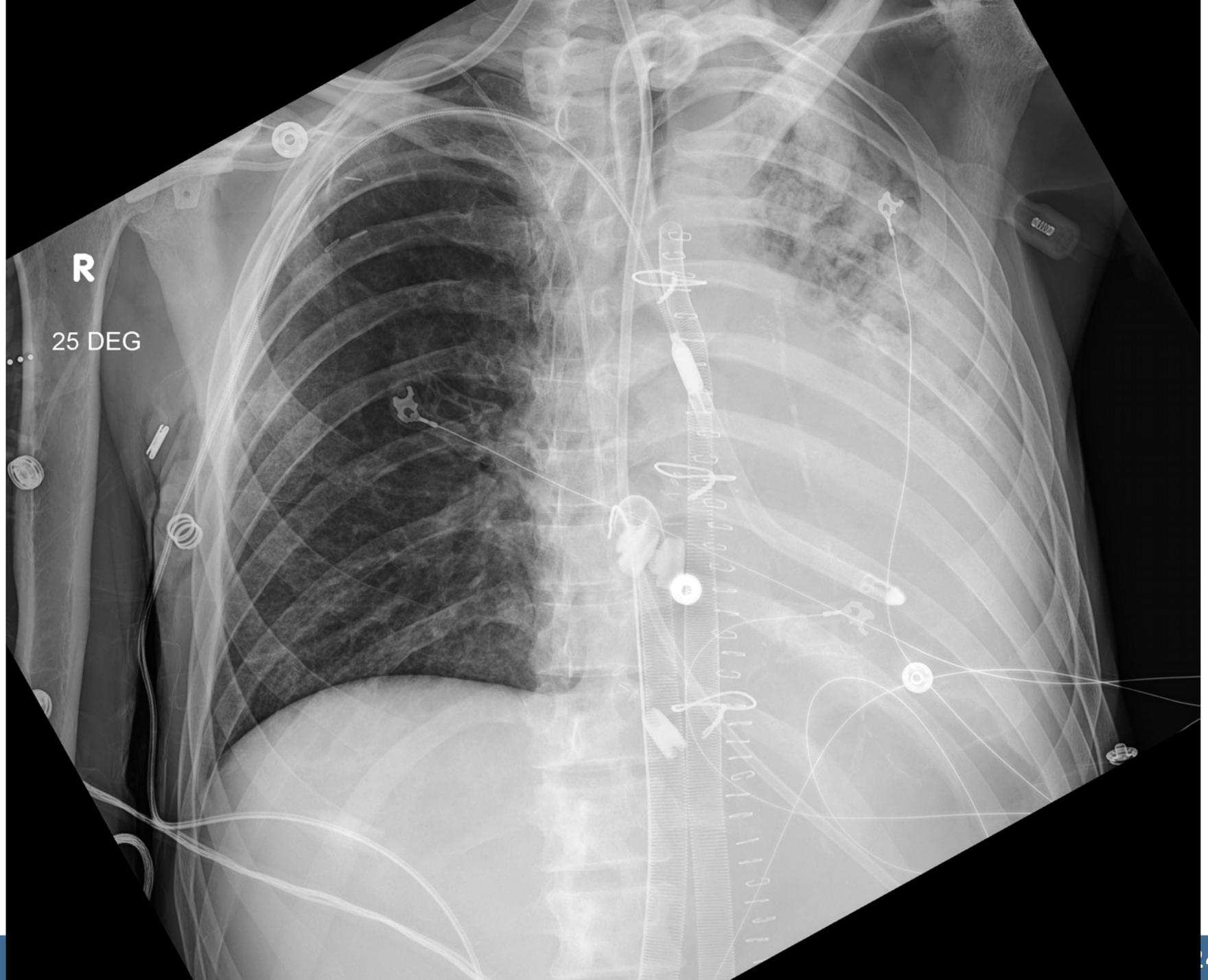
ECHO:

ECMO cannulae and Impella, severe MR, severe RV dysfunction, and LVEF 15%.  
He was neurologically intact and conversant

Left lung: severely injured  
Anuric on CVVHD

Bridge to transplant

Heart tx?  
Heart kidney?  
Heart lung kidney?  
Hospice?



2 months on VA  
ECMO

Heart-Lung and  
Kidney transplant

CXR on ICU arrival

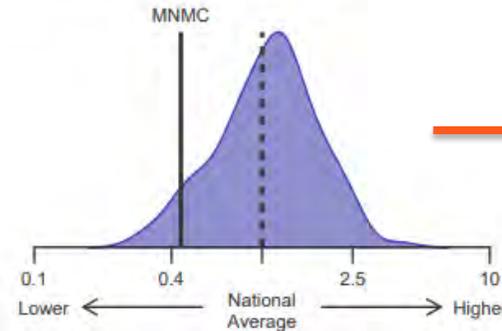




# BROADENING ACCEPTANCE

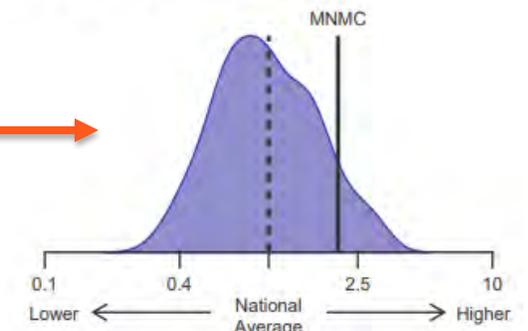
- *Pushing boundaries:*  
*Selection and Acceptance*
- Higher-age transplant candidates
- HCV donors
- DCD donors
- Traveling up to 2500 NM via ex vivo devices, novel cooling techniques

Figure B10. Offer acceptance: Overall



Heart Overall Acceptance 2020 SRTR

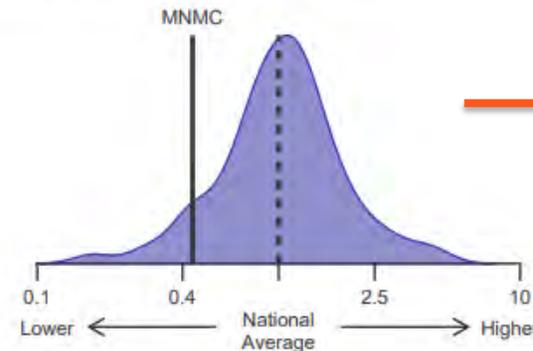
Figure B10. Offer acceptance: Overall



Heart Overall Acceptance 2025 SRTR

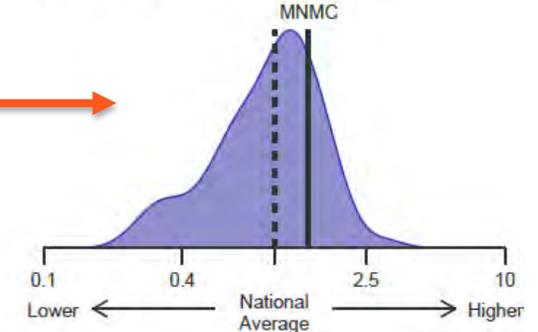
*Shifted from conservative organ acceptance to top 10% transplant rate*

Figure B10. Offer acceptance: Overall



Lung Overall Acceptance 2020 SRTR

Figure B10. Offer acceptance: Overall



Lung Overall Acceptance 2025 SRTR

# KEY FACTORS IN GROWTH ADMINISTRATIVE/LEADERSHIP STANDPOINT

- Building a Mission-Aligned Team
- Equitable opportunity to perform transplants
- Hiring supported by Department's chair
- Unequivocal Organizational Support for Donation and Transplantation
- Respectful M&M conferences
- Medical Surgical Directors close relationship
- Tolerate growing pains
- Tolerance to second donor reviews
- Tolerance for swinging outcomes
- Camaraderie/team cohesion
- Mayo procurement and coordination teams

# UNEQUIVOCAL ORGANIZATIONAL SUPPORT

## Transplant

- Support anesthesia and staffed OR availability for increased transplant, including concurrent and sequential transplants
- Prioritize ICU, PCU and General Care capacity
- Resource investments in innovation

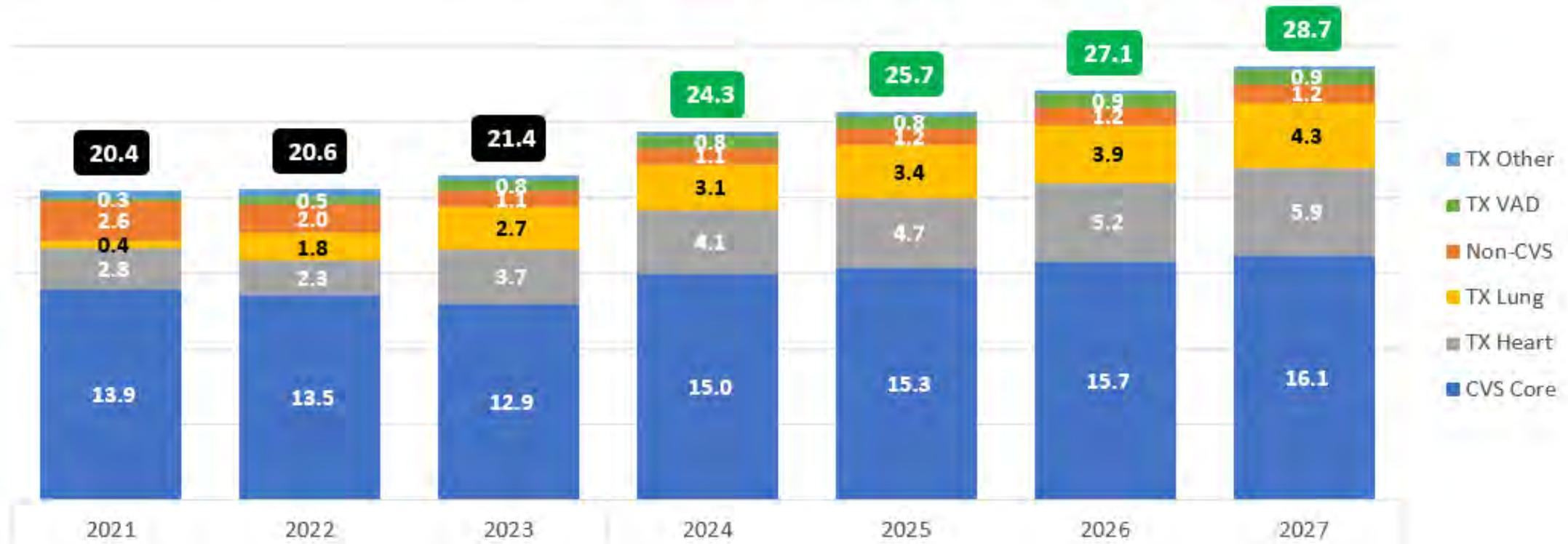
## Donation

- Updated DCD policy
- Identified specific role within critical care anesthesia to serve as declaring consultant
- Established Donor Care Unit

# CVS + TX ANTICIPATED GROWTH (ICU)

ICU Avg Daily Census	Actual			Projected			
	2021	2022	2023	2024	2025	2026	2027
CVS Adult Total	20.4	20.6	21.4	24.3	25.7	27.1	28.7
Estimated Bed Need	25.5	25.7	26.8	30.4	32.1	33.9	35.8

CVS Adult ICU Level of Care Avg Daily Census



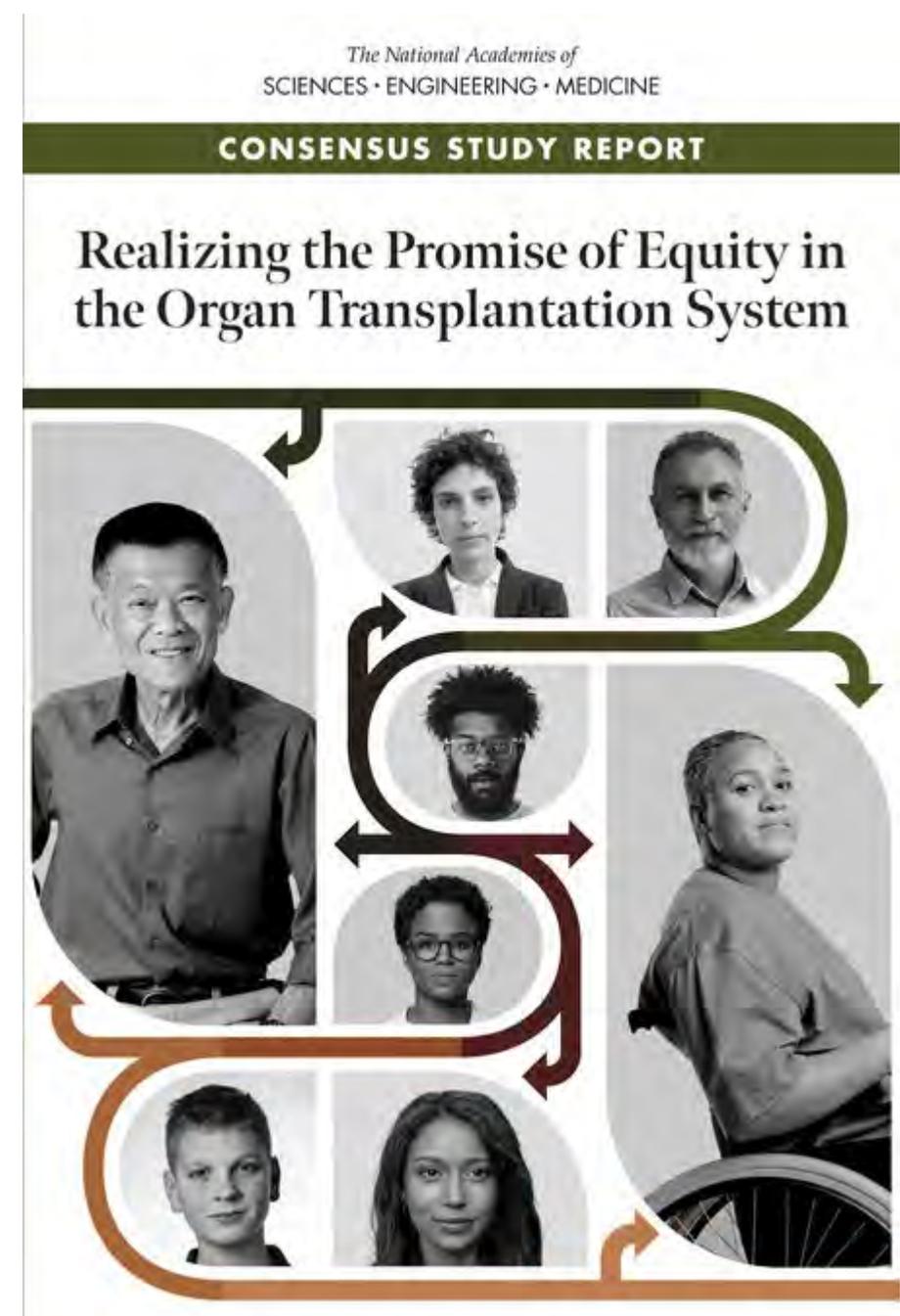
- CVS Core target +16% in 2024, then +2.5 ppy. Tx cases +10 ppy. Readmissions ↑ based on Tx cases.

# ADULT CVS/TX/ECMO DUTIES

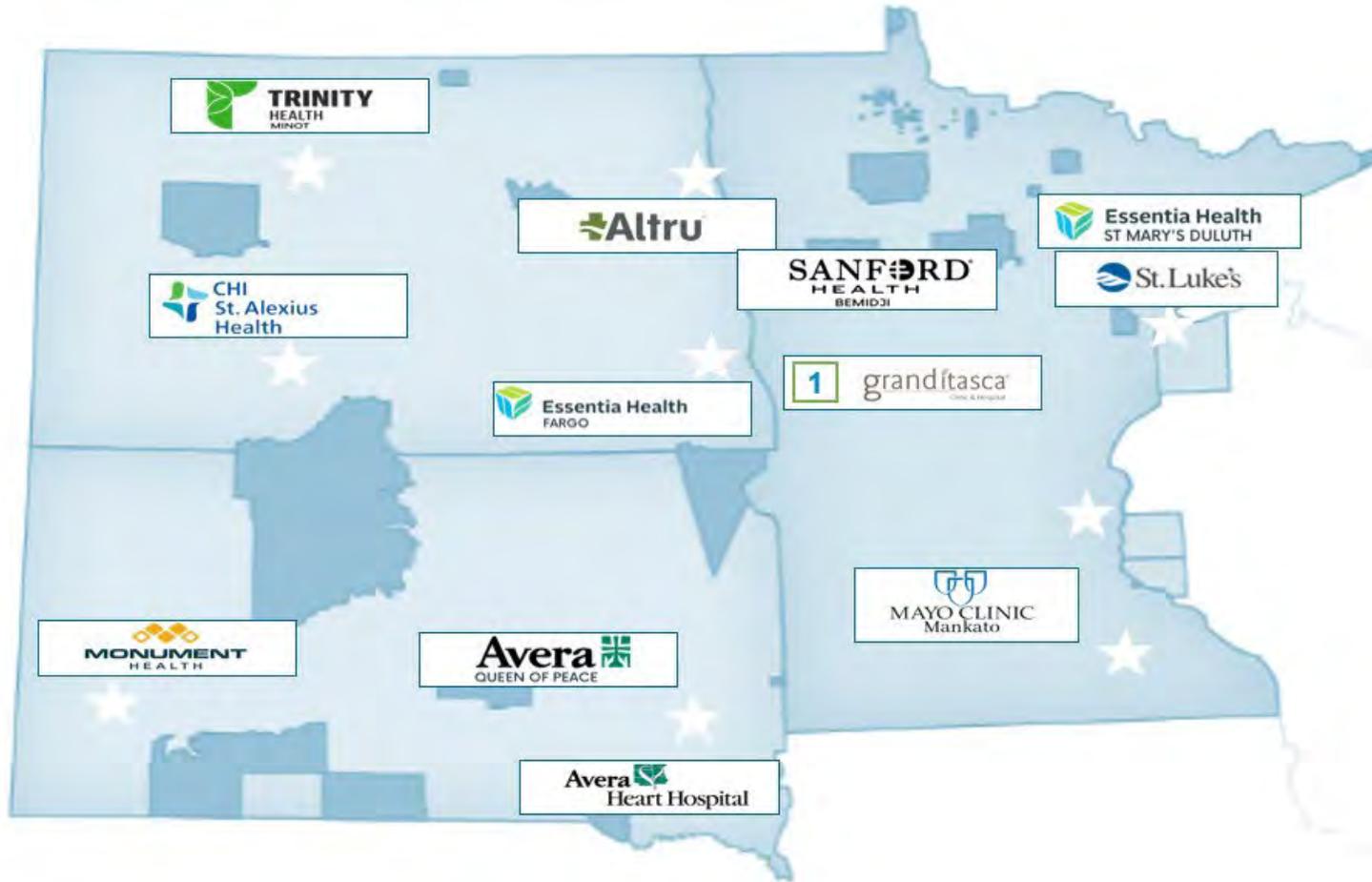
Duty	2023	2024	2025	2026
Cover 5B – 10 beds			X	X
Cover 5G – 12 beds	X	X	X	X
Cover 7G – 12 beds	X	X	X	
Cover 6E – 8 beds	X	X		
Cover 5DE – ~16 beds			X (Q4?)	X
Total ICU Beds	32	32	34-38	38
<u>Average</u> ICU census (predicted)	<b>21-27</b>	<b>24-30</b>	<b>25-31</b>	25-32
Peak ICU census (predicted based on past variability)	<b>35</b>	<b>38</b>	<b>40</b>	41
Cover Rapid Recovery	Rapid Recov Avg 3/day	Rapid Recov Avg ~4/day	Rapid Recov Avg ~4day	
CVS RRTs	X	X	X	X
Eau Claire ECMO eConsults		X	X	X
ECMO consults (MICU, ECPR, PERT, Periprocedural, OSH, Shock Team)	X	X	X	X
ECMO cannulations	X	X	X	X
Deceased Cardiac Donors		X	X	X
CV Fellow Teaching		X	X	X
Review lateral Tx when on triage		X	X	X

# DONOR CARE UNIT GOALS

- Increase local donation
- Advance field through Decedent Model research
- Increase transplant through novel perfusion techniques
- Honor donors and families



# DONOR CARE UNIT LOGISTICS



- Mayo Clinic Critical Care Transport
- Integrated into diversion/triage/transport decision making processes

# DONOR CARE UNIT INTEGRATION

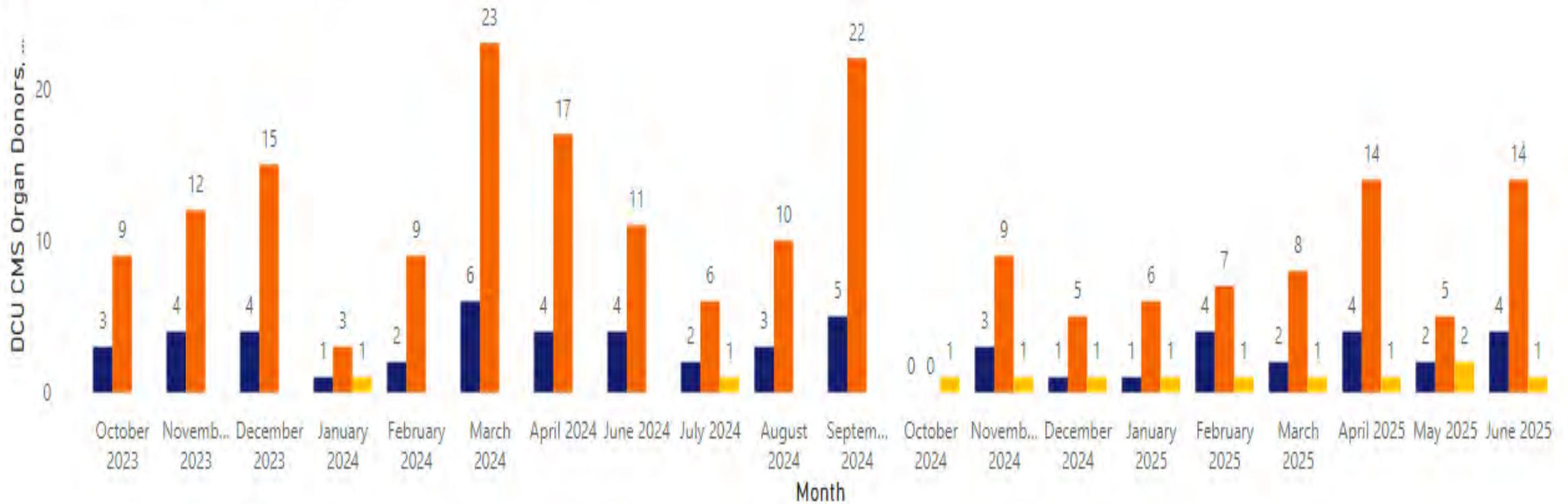
- Consistent ICU processes for standardized donor management, ongoing process refinement
- Streamlined access to specialized diagnostics
- Anesthesia coverage, staffed OR availability
- Expanded in Qtr 1 2025 to include DCD transfers and NRP platform
- Donor honors and hospital leader gratitude offered to every family



# DONOR CARE UNIT

DCU Organ Donors, Non Donors, and Organs Tx

● DCU CMS Organ Donors ● DCU CMS Organs Transplanted ● DCU Non Donors



- 205 CMS organ transplanted from 59 generous Donors  
Oct 2023 – June 30, 2025
- Organs transplanted per donor = 3.47

# DECEDENT MODEL RESEARCH OVERVIEW

**Definition:** Study of transplant interventions in individuals declared brain dead and who ruled out for organ donation for clinical contraindications.

## Key points

- **Purpose and Value:** Enables safe testing of novel therapies, may bridge the gap between animal models and living human trials
- **Scientific Advantages:** Human immune system can be studied for a time-limited period-- similar to organ donation timeline
- **Ethical Framework:** Independent informed consent process with family-- transparency, respect and legacy are foundational
- **Impact:** Has enabled breakthrough advances in xenotransplantation, including sustained function of porcine kidneys in human decedents
- **Operational Requirements:** Requires full coordination across organ procurement organizations, ICU, ethics, research and transplant teams
- **Families** report deep sense of gratitude and contribution



American Journal of Transplantation 24 (2024) 526–532

Contents lists available at ScienceDirect

**American Journal of Transplantation**

journal homepage: [www.ajtransplant.org](http://www.ajtransplant.org)

Personal Viewpoint

**The decedent model: A new paradigm for de-risking high stakes clinical trials like xenotransplantation**

Robert A. Montgomery<sup>1,\*</sup>, Adam D. Griesemer<sup>1</sup>, Dorry L. Segev<sup>1</sup>, Philip Sommer<sup>1,2</sup>

<sup>1</sup> NYU Langone Transplant Institute, New York, NY, USA  
<sup>2</sup> NYU Department of Anesthesiology, Perioperative Care and Pain Medicine, New York, NY, USA

## Key points

- Limitations of the nonhuman primate (NHP) model for predicting human outcomes
- Ethical, legal, religious leader input described
- Decedent model advantages
- Initial scientific results
- **Concludes:** It is our hope that such decedent studies will refine immunosuppressive protocols developed after years of advancements in the NHP model and lead to successful clinical trials.

**THE LANCET**

Volume 402 • Number 10408 • Pages 1107–1198 • September 30–October 6, 2023 [www.thelancet.com](http://www.thelancet.com)

**Immune response after pig-to-human kidney xenotransplantation: a multimodal phenotyping study**

Alexandre Loupy\*, Valentin Goutaudier\*, Alessia Giarraputo\*, Fariza Mezine, Erwan Morgand, Blaise Robin, Karen Khalil, Sapna Mehta, Brendan Keating, Amy Dandro, Anais Certain, Pierre-Louis Tharaux, Navneet Narula, Renaud Tissier, Sébastien Giraud, Thierry Havet, Harvey I Pass, Aurélie Sannier, Ming Wu, Adam Griesemer, David Ayares, Vasishta Tatapudi, Jeffrey Stern, Carmen Lefaucheur, Patrick Bruneval, Massimo Mangiola, Robert A Montgomery

**Summary**  
 Background Cross-species immunological incompatibilities have hampered pig-to-human xenotransplantation, but porcine genome engineering recently enabled the first successful experiments. However, little is known about the immune response after the transplantation of pig kidneys to human recipients. We aimed to precisely characterise the early immune responses to the xenotransplantation using a multimodal deep phenotyping approach.

Lancet 2023; 402: 1158–69  
 Published Online August 17, 2023  
[https://doi.org/10.1016/S0140-6736\(23\)01349-1](https://doi.org/10.1016/S0140-6736(23)01349-1)

**American Journal of TRANSPLANTATION**

Received: 7 December 2021 | Revised: 15 December 2021 | Accepted: 16 December 2021  
 DOI: 10.1111/ajt.16930

**ORIGINAL ARTICLE**

**First clinical-grade porcine kidney xenotransplant using a human decedent model**

Paige M. Porrett<sup>1</sup> | Babak J. Orandi<sup>1</sup> | Vineeta Kumar<sup>1</sup> | Julie Houp<sup>1</sup> | Douglas Anderson<sup>1</sup> | A. Cozette Killian<sup>1</sup> | Vera Hauptfeld-Dolejssek<sup>1</sup> | Dominique E. Martin<sup>2</sup> | Sara Macedon<sup>1</sup> | Natalie Budd<sup>1</sup> | Katherine L. Stegner<sup>1</sup> | Amy Dandro<sup>3</sup> | Maria Kokkinaki<sup>3</sup> | Kasinath V. Kuravi<sup>3</sup> | Rhiannon D. Reed<sup>1</sup> | Huma Fatima<sup>1</sup> | John T. Killian Jr.<sup>1</sup> | Gavin Baker<sup>1</sup> | Jackson Perry<sup>1</sup> | Emma D. Wright<sup>1</sup> | Matthew D. Cheung<sup>1</sup> | Elise N. Erman<sup>1</sup> | Karl Kraebber<sup>1</sup> | Tracy Gamblin<sup>1</sup> | Linda Guy<sup>1</sup> | James F. George<sup>1</sup> | David Ayares<sup>3</sup> | Jayme E. Locke<sup>1</sup>

THANK  
YOU



# Wrap Up

---



# ETF Transplant Growth Change Package



## CHANGE PACKAGE

for accelerating organ  
transplant program growth



Created by:



### Table of Contents

Background .....	3
Strategy 1 Overview: Chart an Intentional Growth Journey .....	4
Change Concept 1.1 – Set Leadership Aims .....	5
Change Concept 1.2 – Establish a Collaborative Partnership and Shared Vision with the C-Suite .....	7
Change Concept 1.3 – Cultivate Sustainable Growth .....	10
Change Concept 1.4 – Emphasize Transplant’s Role and Value in the Institutional Framework .....	12
Strategy 2 Overview: Create a Culture for Growth .....	17
Change Concept 2.1 – Invest in the Right Leaders .....	17
Change Concept 2.2 – Create a Mission-Aligned Team .....	19
Change Concept 2.3 – Cultivate Team Accountability .....	21
Change Concept 2.4 – Cultivate an Identity for Growth .....	22
Strategy 3 Overview: Find a Way to Say Yes .....	24
Change Concept 3.1 – Balance Risk with Reward .....	24
Change Concept 3.2 – Empower Staff to Innovate .....	26
Change Concept 3.3 – Streamline Offer Review Process .....	28
Change Concept 3.4 – Increase transplant options for patients .....	29
Strategy 4 Overview: Expand and Enhance Patient Access .....	32
Change Concept 4.1 – Increase Accessibility for Patients .....	32
Change Concept 4.2 – Increase and Improve Patient Outreach .....	35
Change Concept 4.3 – Increase the Consent Rate for Medically Complex Kidneys .....	37
Strategy 5 Overview: Create Growth Capacity through Community Partnerships .....	39
Change Concept 5.1 – Establish Relationships with Referring Providers .....	40
Change Concept 5.2 – Establish Relationships with OPOs .....	42
Change Concept 5.3 – Establish Relationships with Third-Party Vendors .....	44
Change Concept 5.4 – Establish Partnerships with Local Housing Options .....	46
Acknowledgements .....	48



✓ 19 change concepts

✓ 56 testable actions



# We'd love your feedback

Scan the QR code on the  
right to let us know how  
today went.



## Minneapolis Transplant Growth Collaboration: Post-Event Feedback Survey





# Closing Remarks

---

Thank you for coming!  
Let's turn these ideas into action.