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RESOURCE CENTERS

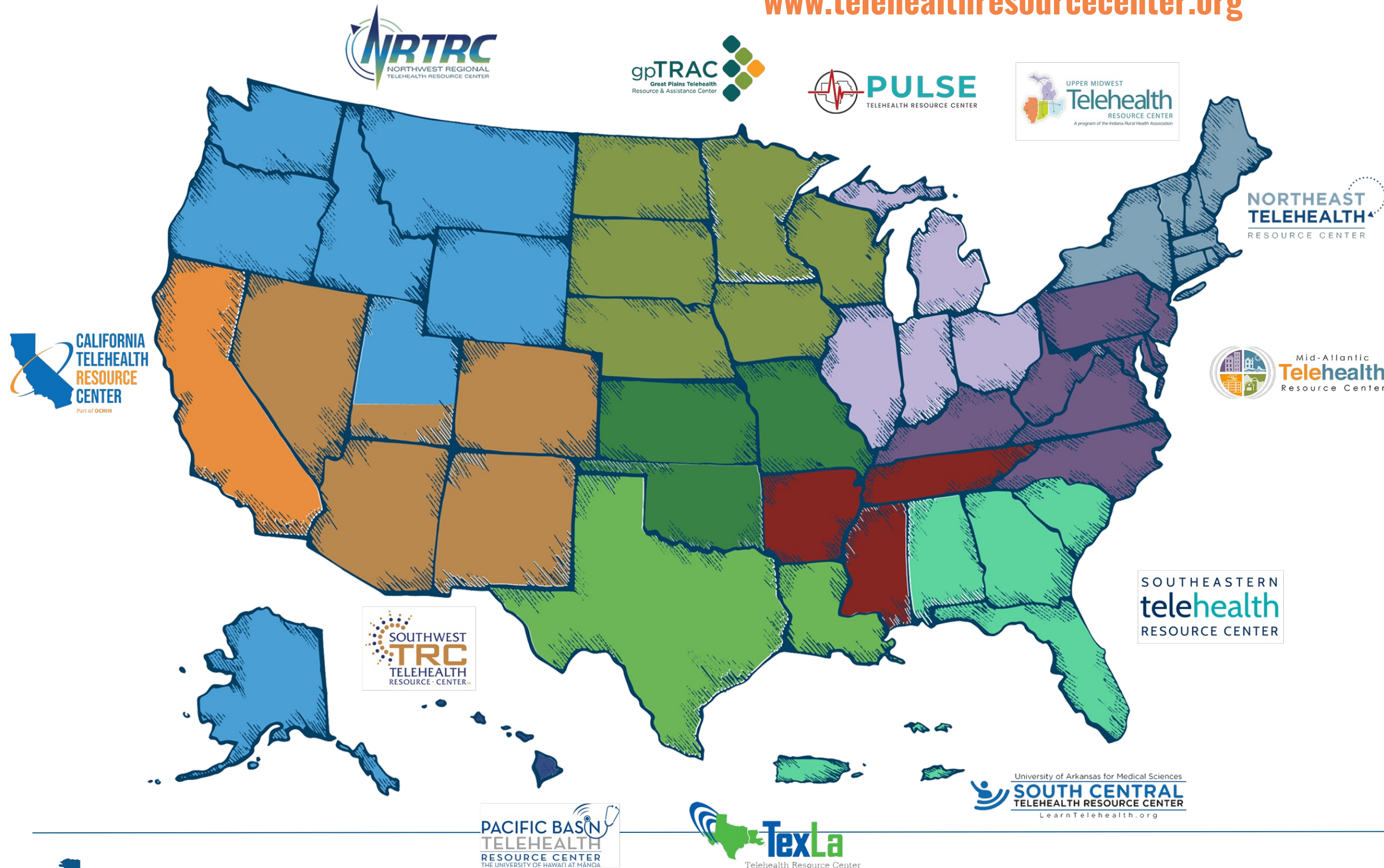
**Leveraging Telehealth and
Mobile Integrated Health for
Access to Renal Transplantation
in Rural West Texas**

September 29, 2026



HRSA Funded Telehealth Resource Centers

www.telehealthresourcecenter.org



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SWTRC	SCTRC	MATRC
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12 REGIONAL RESOURCE CENTERS		

TTAC TelehealthTechnology.org	CCHP
2 NATIONAL RESOURCE CENTERS	

Share your Telehealth Success Story!

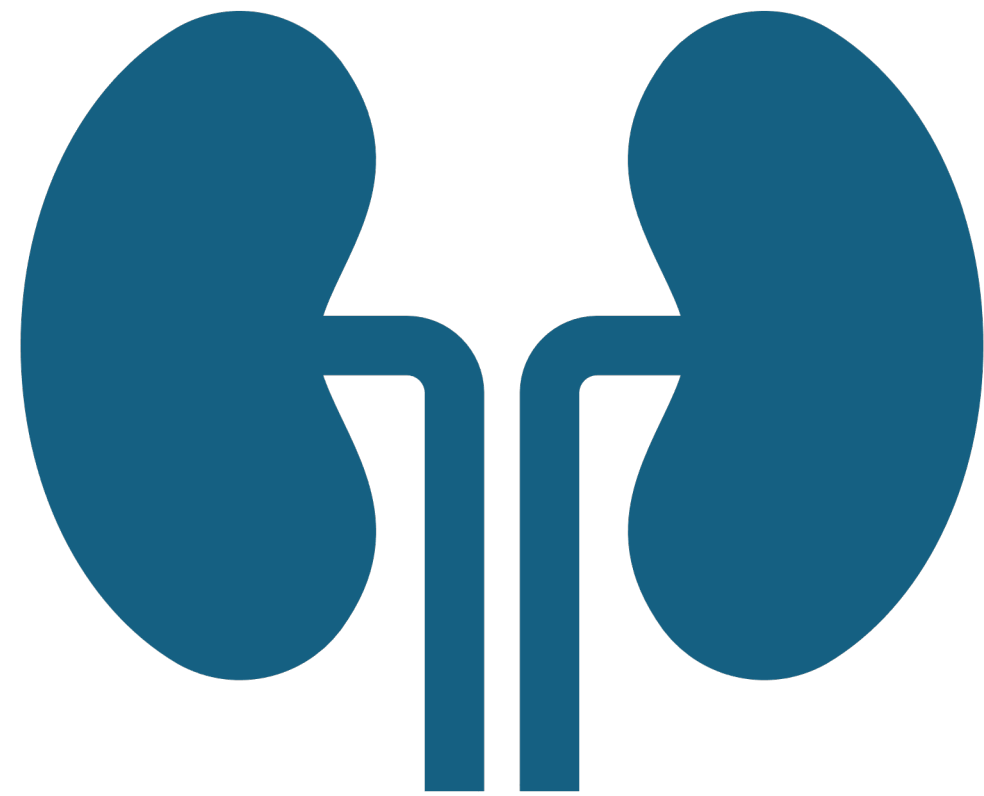
- The National Consortium of Telehealth Resource Centers (NCTRC), representing all 14 Telehealth Resource Centers (TRCs), is collecting success stories from organizations, patients, and providers who have benefited from telehealth **with support from a TRC**. Share how your TRC helped make telehealth work for you for a chance to be featured – along with your organization – in the NCTRC newsletter.
- Survey - <https://www.surveymonkey.com/r/TT2RXQZ>



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There may be delays in response time:
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- Please fill out the post-webinar survey.
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- The webinar is being **recorded**.
- Recordings will be posted to our YouTube Channel:
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Leveraging Telehealth and Mobile Integrated Health (MIH) for Access to Renal Transplantation in Rural West Texas

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Covenant Medical Center

Texas Tech Health Science Center



TEXAS TECH UNIVERSITY
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CovenantHealth 

Objectives



Understand the benefits of kidney transplant



Discuss barriers to transplant in rural West Texas



Describe use of Telehealth and Mobile Integrated Health (MIH) at our transplant program



Discuss ways to expand MIH for patient benefit

Benefits of Kidney Transplant

Kidney Disease is Costly

- Shortens life expectancy
 - Average diabetic <5years
 - 1 in 5 die the first year of dialysis
- Dialysis required to sustain life
 - Profoundly altered lifestyle
 - Side effects
 - Mental and physical toll
- High Cost
 - Health Care \$/Medicare
 - Patient cost – inability to work



Transplant is Best Treatment Option for Renal Failure

Improved lifestyle

- No dialysis
- Better health
- Improved dietary options
- Energy
- Return to work

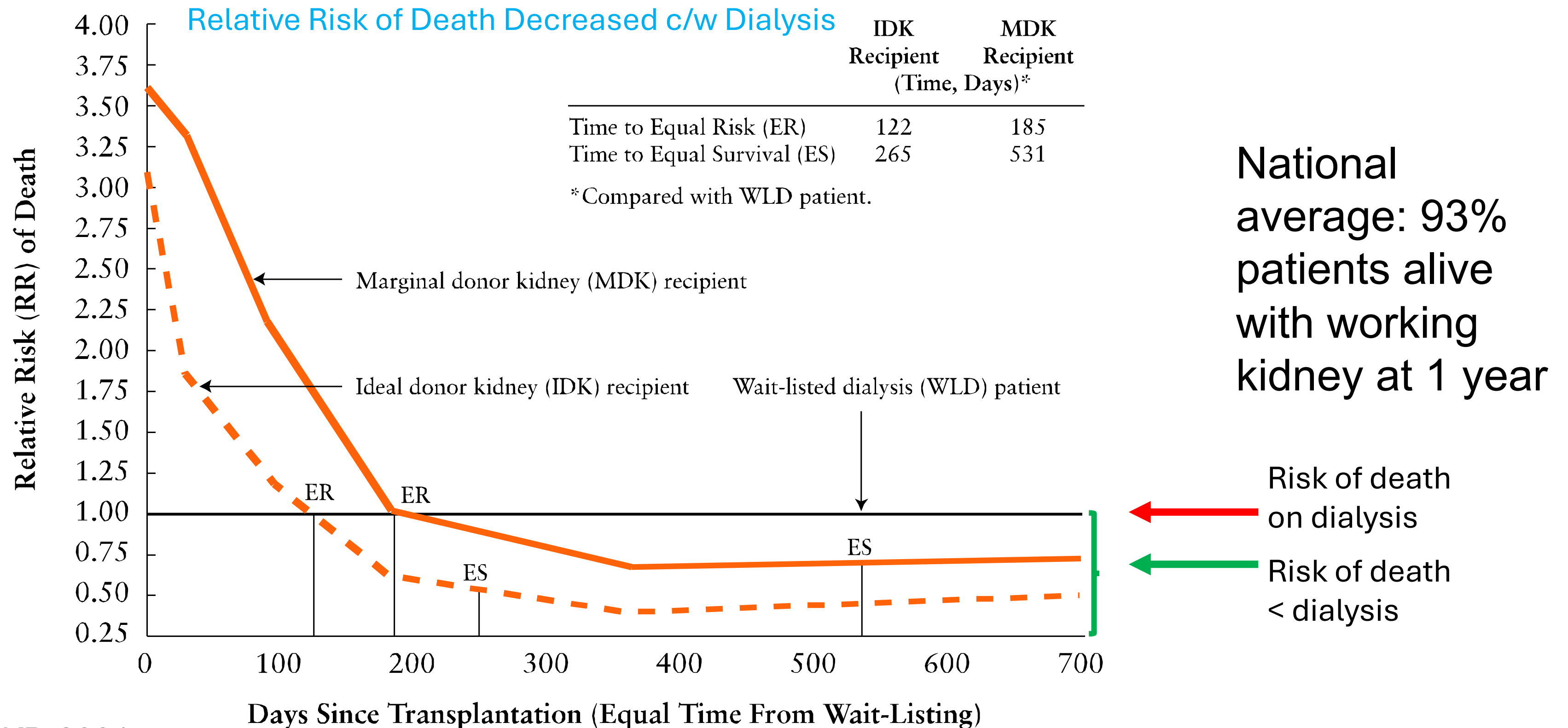
Increased life expectancy

Net cost savings

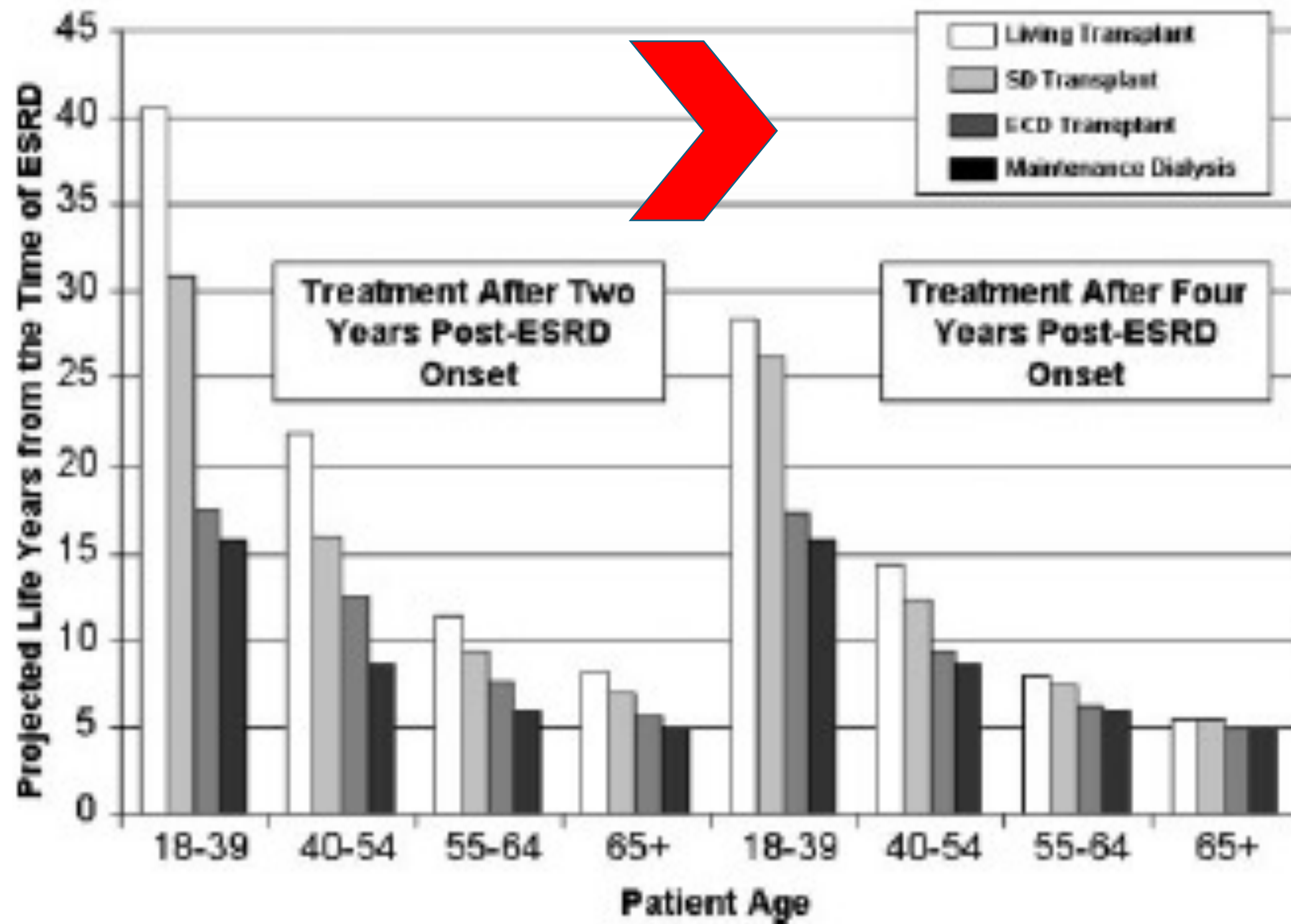
- Dialysis >\$90,000 per year
- Transplant cost much less after first year
- Saves medicare \$\$\$\$



Kidney Transplant Improves Life Expectancy



Early Transplant Yields Better Outcomes

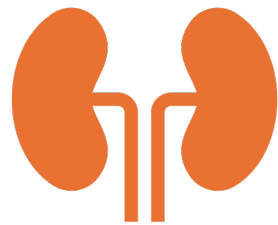


- Transplant recipients live longer than dialysis patients
- Waiting decreases benefit

SRTR
Schold, et al.
CJASN 2006

Figure 1. Projected life expectancy after ESRD onset by recipient

Kidney Transplant Requires Long-Term Multidisciplinary Care and Patient Participation



Kidneys are limited resource

Must be healthy enough for long term survival



Immunosuppression life-long

Complications

Compliance

Limited Resources can cause graft failure



Comprehensive evaluation

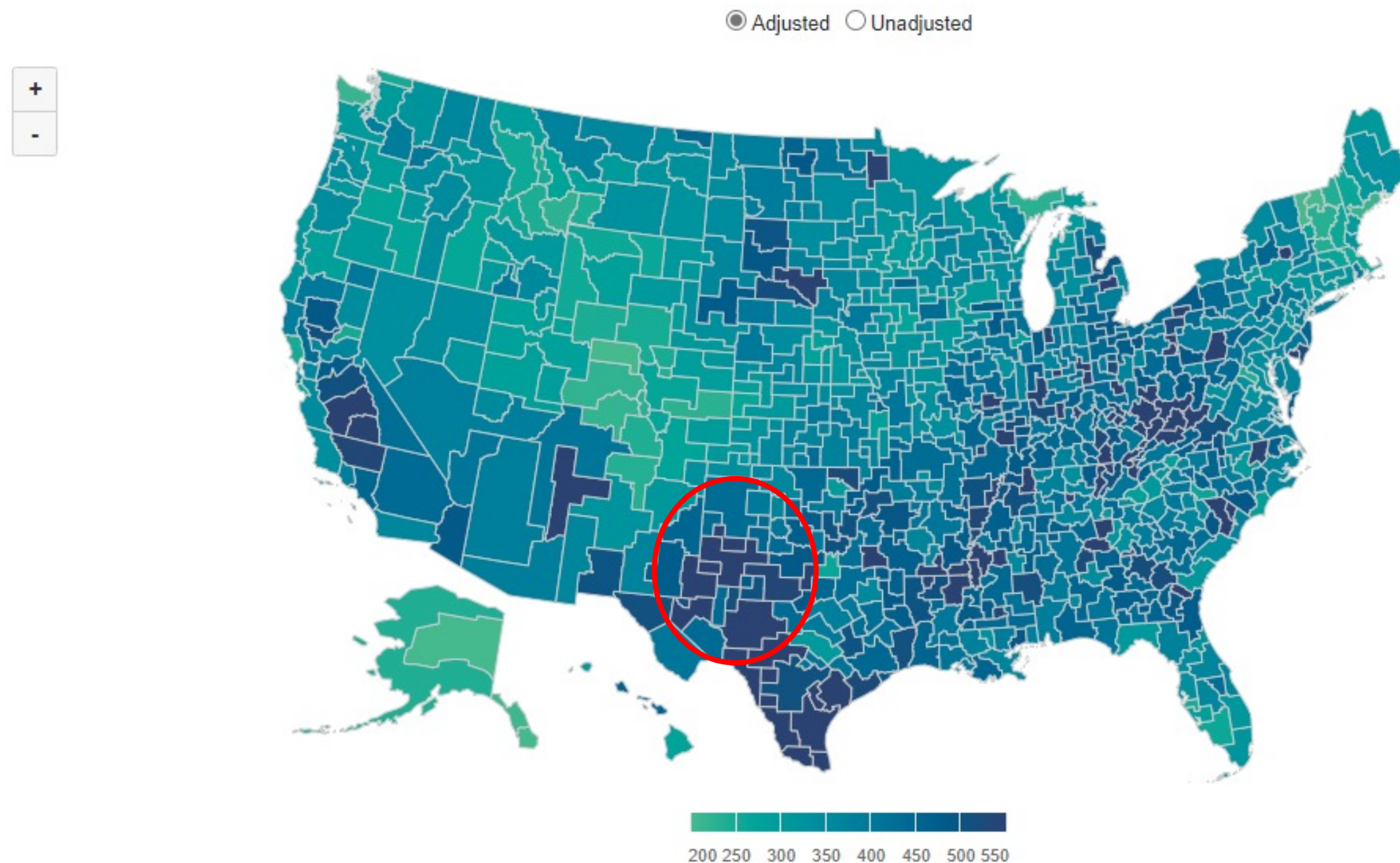


Barriers to Transplant in West Texas



Very High Incidence and Prevalence of ESRD in West Texas

Figure 1.3 Incidence of ESRD by Health Service Area, 2019-2020



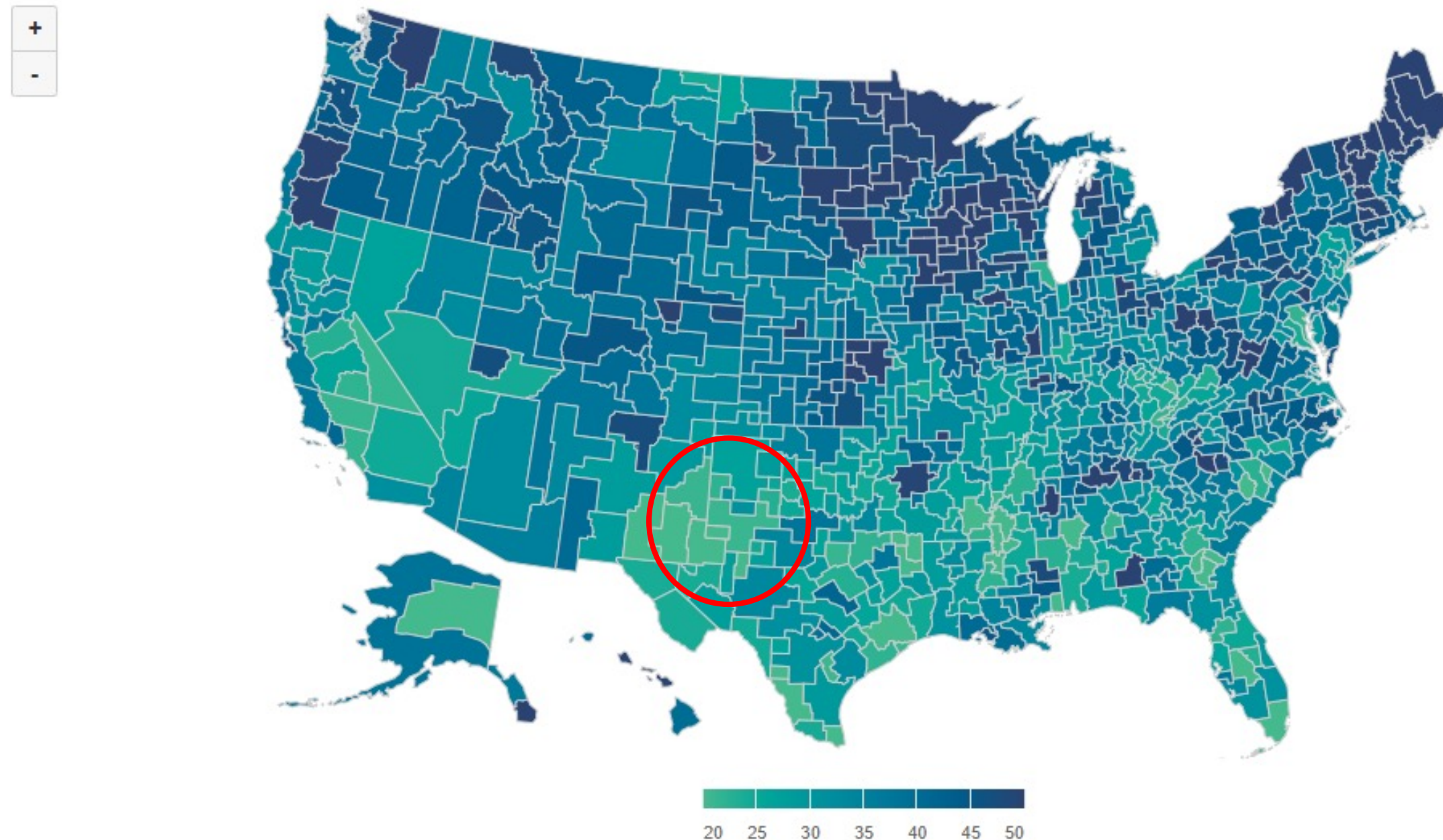
West Texas as Very High Mortality from ESRD

- *Geographic variation of all cause mortality (death per thousand person years) in adult ESRD patients. USRDS 2023*



Low Rate of Pre-ESRD Nephrology Care in W.T.

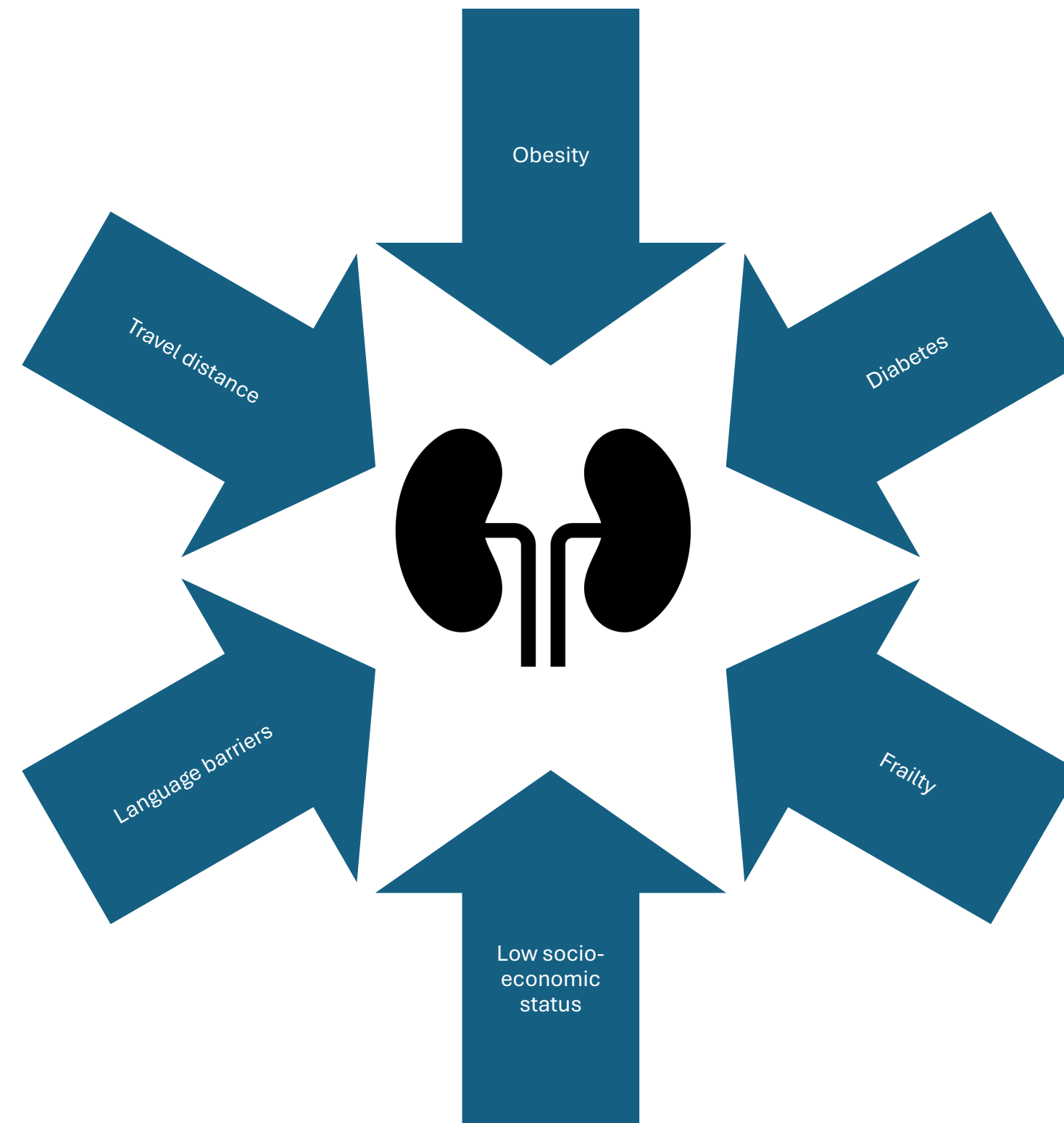
Figure 1.12 Prevalence (%) of >12 months of pre-ESRD nephrology care among incident ESRD patients by Health Service Area, 2019-2020



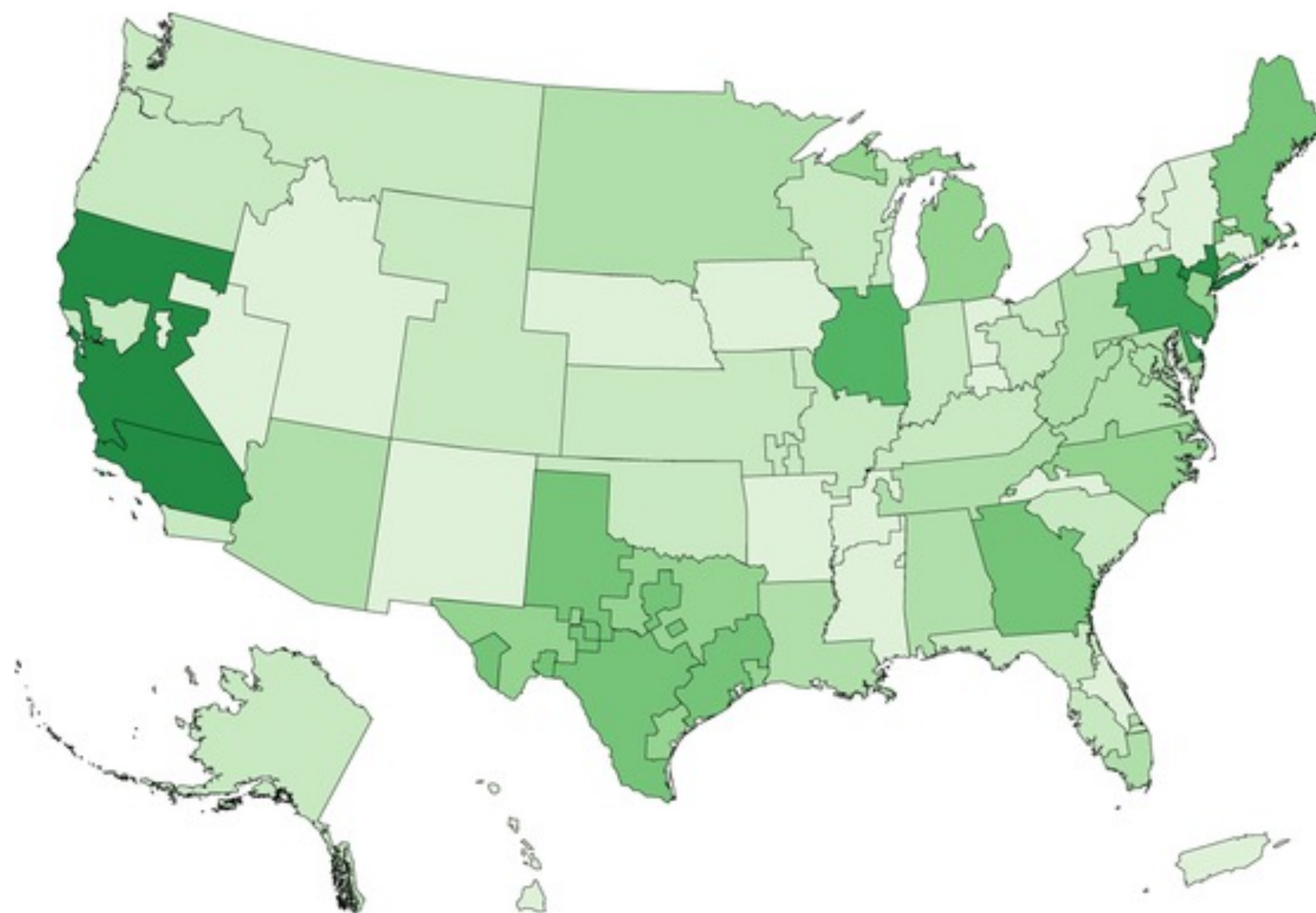
Lack of access
Distance
No diagnosis
Referrals
Education

Data Source: USRDS ESRD Database. U.S. ESRD patients with a Medical Evidence Report (form CMS 2728), 2019-2020.

West Texas Population has High Prevalence of Characteristics Associated with Poor Transplant Outcomes



Increased Frailty in West Texas (2000-2018)



Frailty is associated with poor outcomes

- Mortality
- Low quality of life
- Delirium and cognitive decline
- Long length of stay and readmission
- Intolerance of immunosuppression

AJT 2019. 20(4):1170-1180

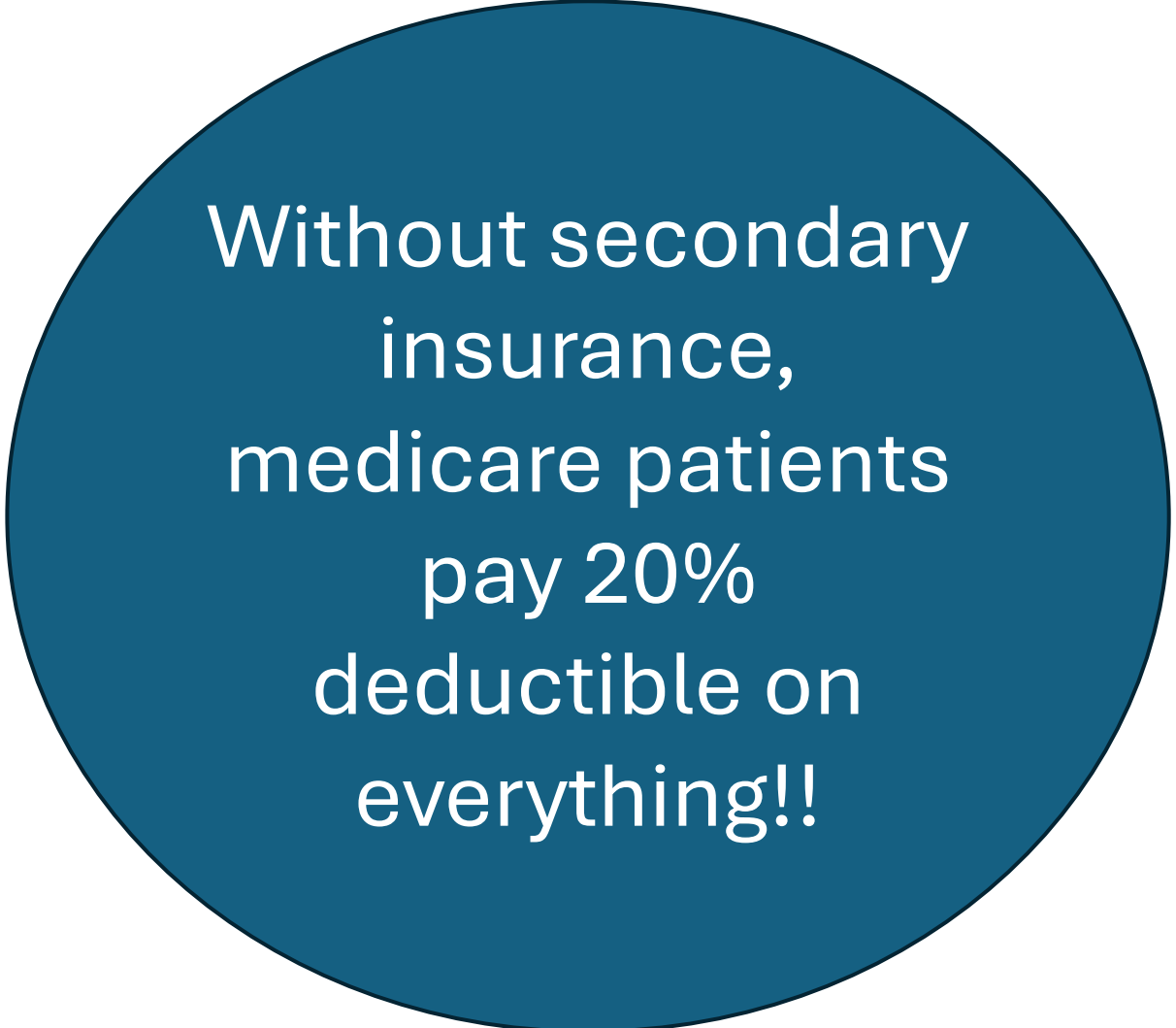
AJT 2014 Oct 20:15(1):149-154

Barrier: No Transplant Program in West Texas until 2024

- Patients had to travel MINIMUM 250 miles for transplant (DFW, San Antonio)
 - Visits for evaluation and listing
 - Annual waitlist appointments
 - Long-term stay (2-3 months) in remote city
 - Frequent follow-up post transplant
 - No care locally if urgent issues

Non-Medical Barriers to Transplant

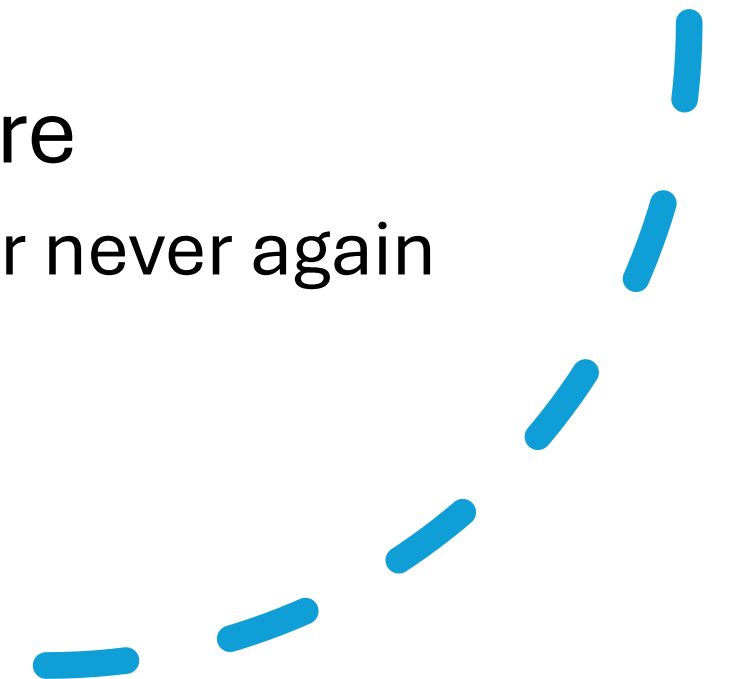
- Health literacy
 - Transplant requires patient involvement
 - Understand transplant as option
 - Vitals, medications, when to call
- Social support
- Financial
 - Insurance premium costs
 - Co-pay costs
 - Deductibles
 - Medications costs
 - Travel costs



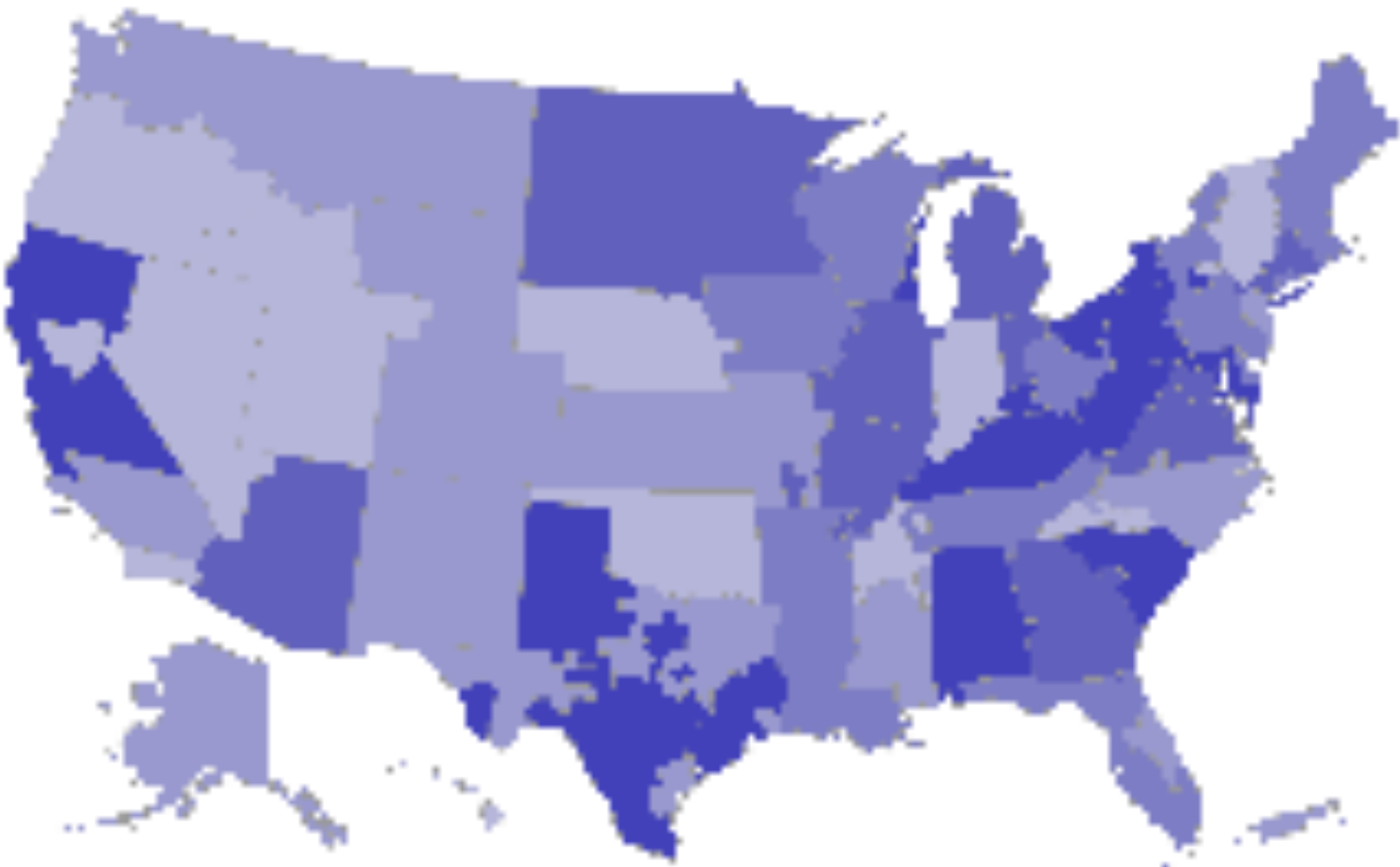
Without secondary
insurance,
medicare patients
pay 20%
deductible on
everything!!

Financial Barriers to Transplant

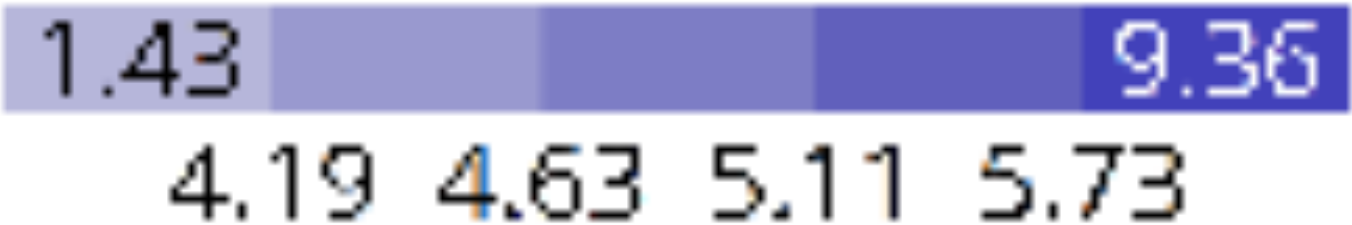
- Major non-medical barrier to proceeding
 - Procedure costs
 - Medication costs
 - Inadequate insurance
- Apply for all available help
 - AKF (benefit for dialysis patients)
 - Pays secondary insurance premium
 - Extra-help
 - Medicare coverage
 - Secondary insurance for medicare
 - ***only eligible in a short window or never again
 - Fundraising



Without a Transplant Program, Waiting List Death Rate was Increased in West Texas



This data reflects a time period without any transplant center in Lubbock

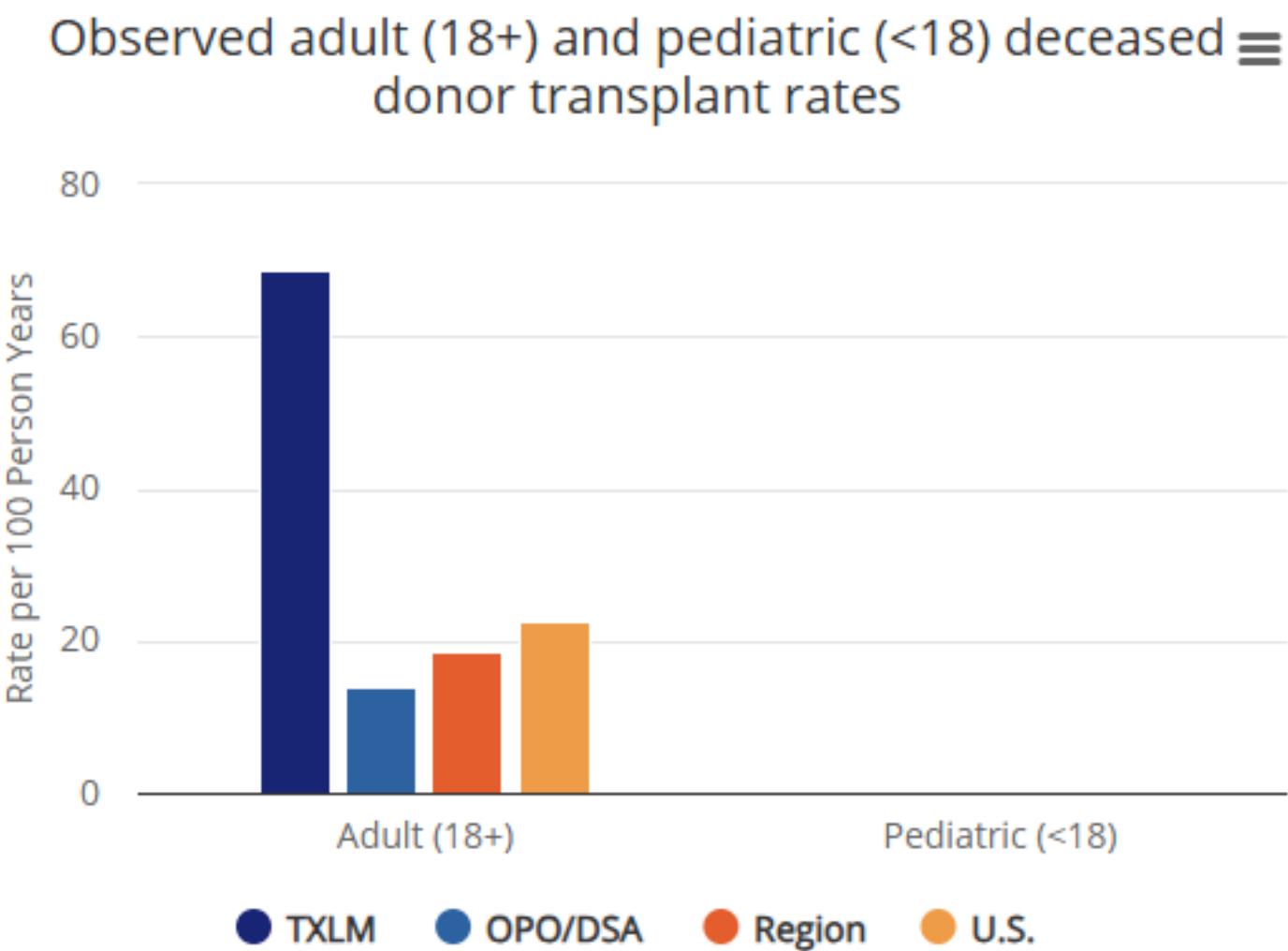
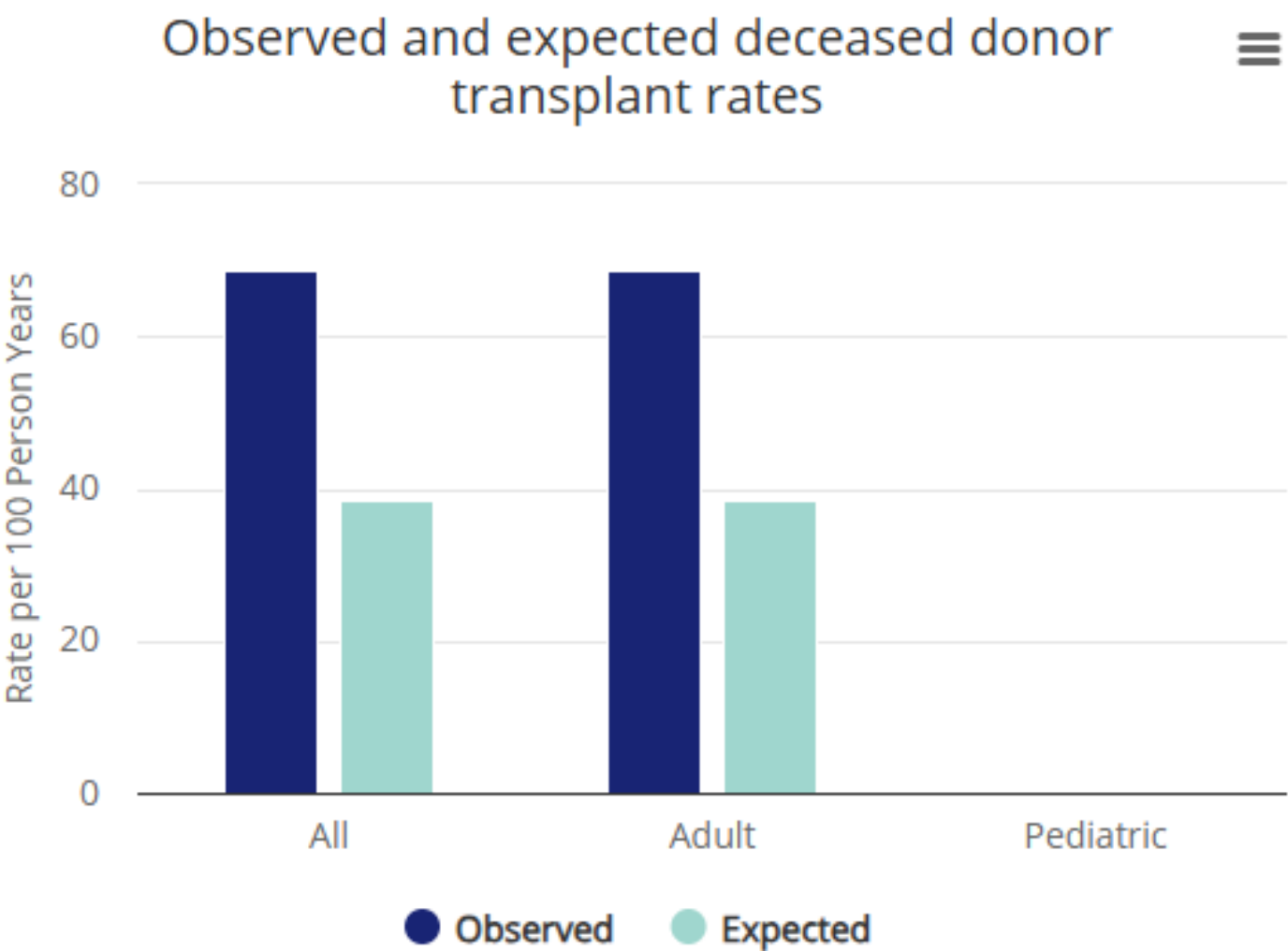


In 2024, Covenant Health/TTUHSC Jointly Opened Renal Transplant

SRTR 2026

Deceased Donor Transplant Rates

07/01/2023 - 06/30/2025



Describe use of Telehealth and Mobile Integrated Health (MIH) at Covenant Transplant

Video education sessions

Spanish versions native speakers

Multiple points of care

Telemedicine

Mobile Integrated Health project

Video Education Modules for Distant Patients

- **Initial information session**
 - In person or telemedicine
 - Video **plus staff interaction**
 - Helps patient understand transplant as option
- **On-going education (reinforce conversations)**
 - Transplant complications
 - When/who to call

- **Opportunities for Primary Care**
 - Post operative teaching
 - Correct blood pressure monitoring
 - Drain management
 - Blood sugar teaching
 - Injection teaching
 - Dietary changes
 - Exercise strategies

Highlights of Telemedicine at Covenant Transplant

Stable patients

- Initially need to see patient
 - Wounds
 - Teaching
- Pre- versus Post-Transplant phase

Frequent visits after transplant

- Twice weekly → Weekly → Monthly
- Alternate telemedicine with in-person

Tele-nephrology

- Nephrologist – every other visit on-line for distant patients
- Allows extended coverage

Pre- Transplant Telemedicine

- Pre-evaluation Education
- Follow-up Transplant evaluations
 - Testing review
 - Information gathering
- Wait-list re-evaluation
 - Monitoring status on list
 - Social work re-assessment
 - Review medical updates
- Finance follow-up
- Social work discussions
- Nurse education

Post- Transplant Telemedicine

Routine monitoring (with labs)

- Immunosuppression monitoring
- Medication review and education
- Hypertensive medication monitoring
- Diabetic medication adjustments

Nurse, Dietitian, Pharmacist
education

Telemedicine Tips and Tricks



Know your patient

Early conversation about need to travel if problems
Empower self to switch to in-person if needed



Utilize photography

Secure messaging systems
Pictures of concerns (wound, drain, mouth ulcer)



Utilize staff

Nurses speak with patients frequently
Trust in nurses “gut” if patient needs to come in

Telemedicine Reduces Barriers

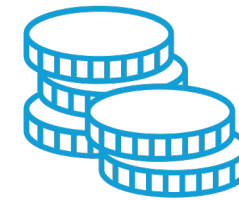


Reduce travel costs

Round trip to Amarillo 240 miles
Overnight stays for early appointments



Less time off work



Reduce co-pay/visit deductibles



Prevent exposures to infectious organisms

Mobile Integrated Health (MIH) Implementation for Post- Transplant Recipients

- Address needs specific needs:
 - Low health literacy
 - Long travel times (3hrs)
 - Significant cost of readmission
 - National average 30.5% readmission in first month (AJT 2014)
 - New Program costs increased
 - Lack of regional hospitals
- Goals:
 - Reduce 30 day readmission
 - Facilitate weekend/holiday discharge
 - Facilitate after hours care
 - Improve patient outcomes
 - Address educational barriers

What is Mobile Integrated Health at Covenant?

- Initially created for local cancer center
- 24/7 dedicated MIH service for patients in Lubbock County
- Specific Transplant protocols
- EMS providers received training on post-transplant care
- Patients introduced to MIH prior to discharge
- No cost to patient or program
 - Funded by Covenant Health Partners (ACO)
- Ongoing verbal communication with transplant staff

What Does MIH Do?

- Initial visit with home safety inspection
- Routine visits
- Weekend/Holiday Visits
- Urgent medical assessments
- Vital signs
- Lab blood draws
- Safety checks
- Patient Education
- Objective patient information communicated to care team
- Provide IV fluids
- Medical Interventions



MIH Extends Quality Care Beyond the Clinic to Comfort of the Home

Summary of First 10 Transplants at Covenant

- 9/10 Patients utilized MIH services
 - Median time between discharge and first visit: 1 day
 - 4/10 patients received a holiday or weekend discharge
 - MIH visited patients between 2 and 9 times within 30 days
- All 9 patients using MIH received lab draws and wound checks
 - 8/9 patients received these services during the first weekend after discharge
 - 1/9 patients received IV fluids
 - 1/9 patients had a drain de-clotted

MIH Prevented 5 Readmissions with First 10 Patients!

- Hyperkalemia
 - lab recheck and vitals
 - medications given
- Acute Swelling
- Hyperglycemia
- Severe dehydration
 - Initial high UOP
 - Given fluid
- Reported severe hypertension

MIH Cannot Prevent All Readmission

- 2 patients were readmitted within 30 days of transplant:
 - Severe gastritis/duodenitis
 - Rotavirus
- Total readmission rate for first 10 patients was 20% (compared with 30.5% nationally)

Discussion

Not only did MIH extend the quality patient care from the clinic to the comfort of our patients' homes, but they went above and beyond by:

- Verifying patient safety
- Conducting home safety checks
- Replacing lightbulbs
- Checking smoke detectors
- Identifying home trip hazards
- Provided fire extinguisher
- Communicated concerns not addressed by patient

Conclusion

- We documented MIH prevention of five hospital readmissions and facilitated weekend/holiday discharges, while continuing our mission of patient education
- Adapting a local program like MIH in other transplant clinics can be a great way to improve patient outcomes in a cost effective manner
- We will continue to try to broaden access of MIH to other counties as a cost-effective improvement to post-transplant patient care

Questions?

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Our Next Webinar

The NCTRC Webinar Series

Occurs 3rd Thursday of every month.

Hosting TRC: Southeastern Telehealth Resource Center (SETRC)

Telehealth Topic: Rapid Care, Remote Reach: Disaster Medical Reserve Corp (MRC) Telehealth Strike Team Model

Date: Thursday, October 15

Times: 11 AM – 12 PM PT



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<https://www.surveymonkey.com/r/XK7R72F>

