

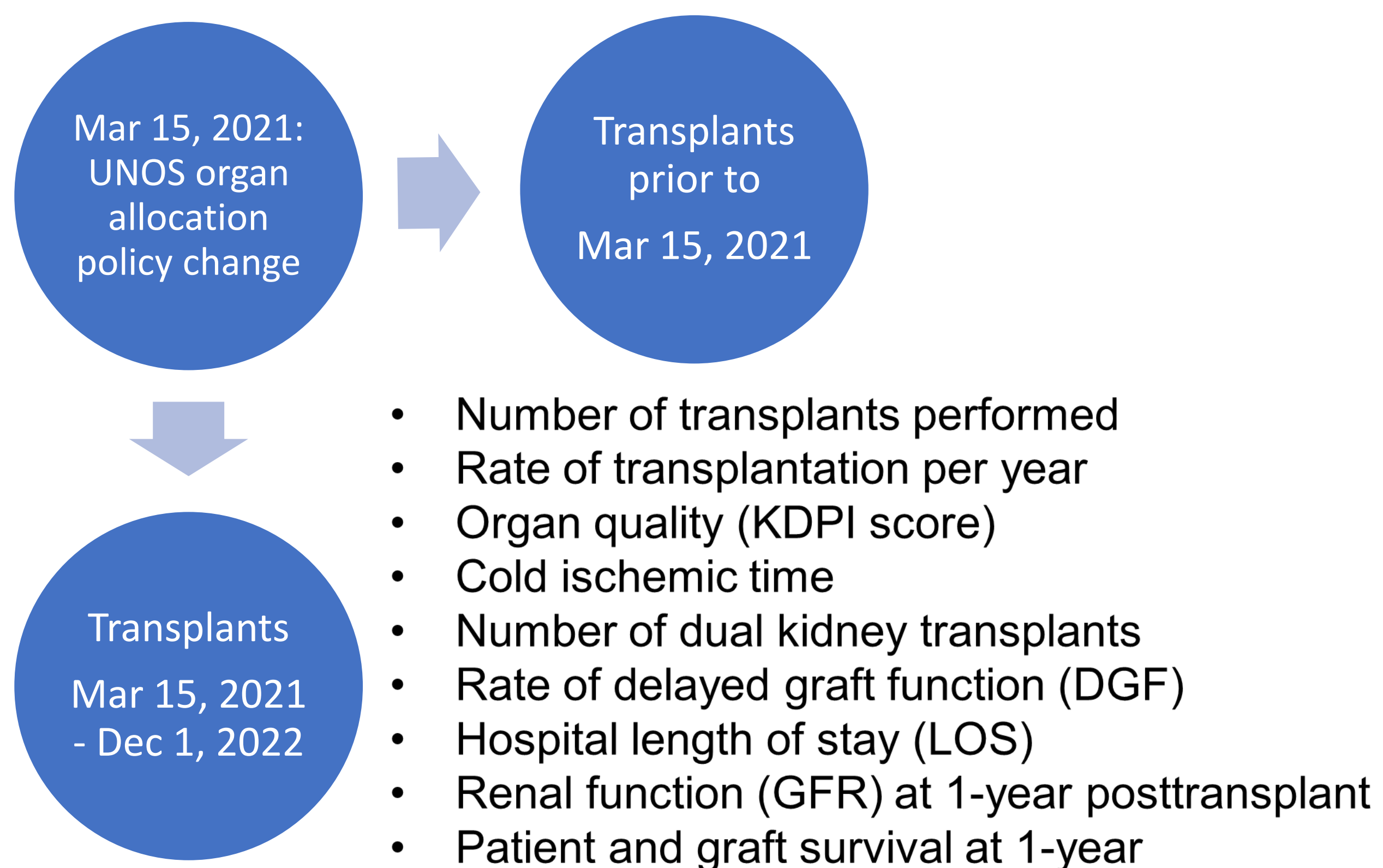
# The Effect of Change in the Kidney Allocation Policy on Outcomes of a Sole Transplant Center in a Single Donation Service Area



## BACKGROUND

- Kidney allocation prior to organ allocation policy change:
  - Determined by the donation service area (DSA) and the Organ Procurement and Transplantation Network (OPTN)
  - Recipients chosen based on organ procurement organization first
- March 15, 2021 policy change:
  - Eliminated DSAs
  - Offers based on distance from donor hospital (first within 250 nautical miles)
- Believed to affect hospitals that had the sole Transplant Center for that DSA disproportionately.
- **Objective:** Assess whether promoting regional organ sharing led to changes in volume and outcomes of one such transplant center.

## METHODS



## Kidney transplant volume and outcomes before and after allocation policy change

	Pre-Allocation Change	Post-Allocation Change	p-value
Rate of transplants per year	149	138	0.4
Mean KDPI	53	36	<0.05
Cold ischemic time (hours)	14.7	23.4	<0.05
Dual kidney transplants	1	32	<0.05
DGF	42/116 (36%)	100/223 (44%)	0.126
LOS (days)	5	5	-
GFR at 12 months (mL/min)	50.78±9.53	54.20±9.68	0.69
1-year death-censored graft survival	99.13%	98.65%	0.69
1-year patient survival	99.13%	97.3%	0.26

## RESULTS

After allocation policy change:

- Rate of transplantation decreased from 149 **transplants/year** to 138 transplants/year.
- Cold ischemic times significantly increased from 14.7 hours to 23.4 hours.
- Number of dual kidney transplants significantly increased from 1 to 32 transplants.
- Rate of DGF, LOS, GFR at 1-year, and patient and graft survival at 1-year was largely unaffected.

## CONCLUSIONS

The kidney allocation policy change resulted in significantly longer cold ischemic times, likely secondary to increased donations from beyond 250 nautical miles.

An increase in dual kidney transplants may have mitigated potential policy change effects on transplant outcomes.

## DISCLOSURES

The authors do not have any conflicts of interest to disclose.

## REFERENCES

Abigail W Cheng, MD1, Chelsey Wongjirad, DO1,2, Mary Froehlich, MD1, Sunil Patel, MD2 1Surgery, UNLV School of Medicine, Las Vegas, NV, United States; 2UMC Center for Transplantation, University Medical Center of Southern Nevada, Las Vegas, NV, United States

(IRB# UMC-2023-479)

