## Healthcare Utilization and Medical Outcomes in the First Three Years Post-Transfer **Among Young Adult Solid Organ Transplant Recipients**

Lauren F. Kelly E. Rea, MS, Grace K. Cushman, MS, Lauren F. Quast, MS, Roshan George, MD, Arpita Basu, MD, Ryan Ford, MD, Wendy Book, MD, & Ron L. Blount, PhD

## INTRO

- Young adult (YA) solid organ transplant recipients experience negative medical outcomes during transition to adult healthcare.
- Traditionally, transition success is considered attendance at first adult appointment within a specific time; however, given transition continues into adult care, this is not comprehensive.
- The current study compared outcomes between two transition success criteria:
  - 1. First adult appointment attendance within 12 months
  - 2. Retention in adult healthcare over 3 years

### **METHODS**

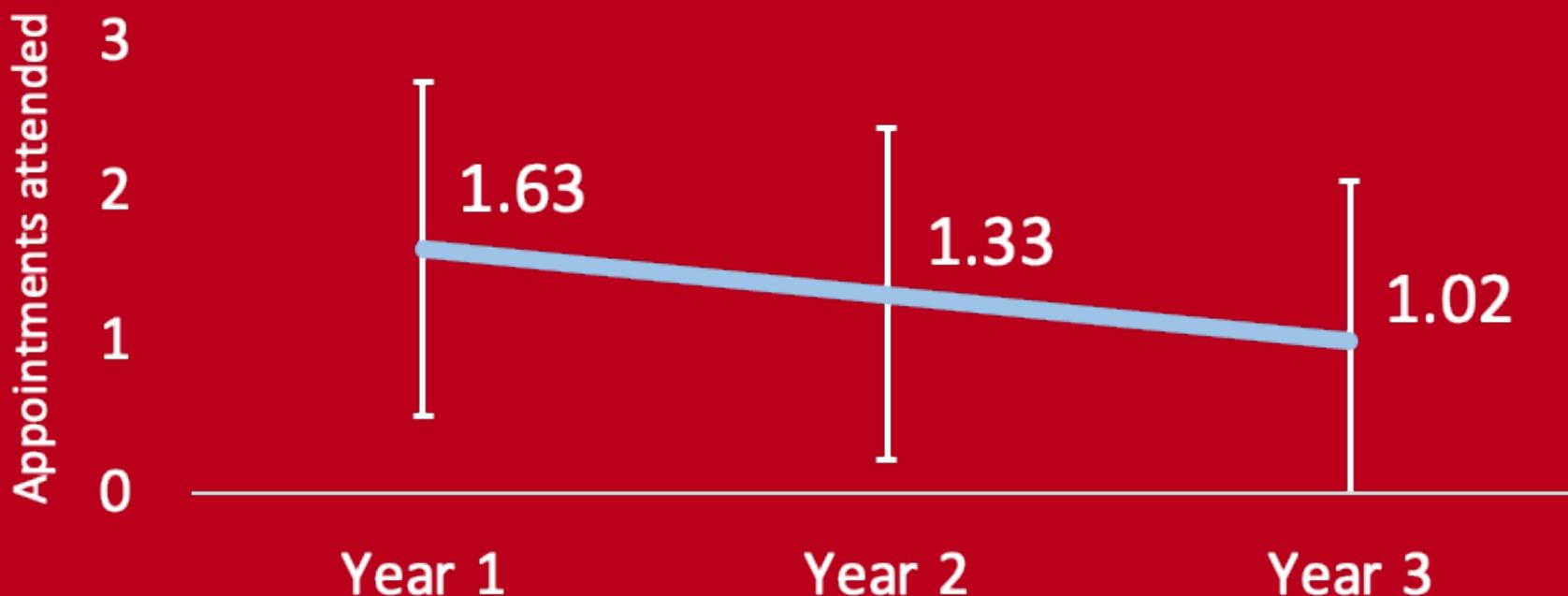
- 49 YA heart, kidney, and liver transplant recipients transferred 2014 - 2020
- Medical chart review examined posttransfer healthcare utilization and medical outcomes.
- Independent samples t-tests, Chi Square analyses, and Mann-Whitney U-tests examined group differences in medical outcomes based on success criteria.
- Linear growth curve modeling examined appointment attendance trajectory.

# **Retention in adult healthcare was** significantly related to more improved clinical outcomes, as compared to initial engagement

	Initial engagement (attended first appt within 1 year)			(average	Retention (average # of appts in first three years $\geq$ 1)			
	Yes n = 37	No <i>n</i> = 12	t/U/χ2	Yes n = 3		t/U/χ2		
Number of ED visits	.76(1.12)	1.67(2.15)	NS	.67(.9	99) 1.85(2.15)	NS		
Number of hospitalizations	.49(.93)	.92(1.24)	NS	.36(.6	58) 1.23(1.48)	154.50*		
<b>Duration of hospitalizations</b>	2.16(5.23)	3.92(7.49)	NS	1.08(3	.16) 6.77(8.99)	147.50*		
<b>Rejection episodes</b>	2(5%)	4(33%)	10.29**	3(8%	6) 3(25%)	5.60*		
Transplant re-evaluations	3(8%)	5(42%)	9.13**	2(5%	6(50%)	15.68***		
Patients taking Tacrolimus	<i>n</i> = 25	<i>n</i> = 5		<i>n</i> = 2	27 <i>n</i> = 3			
MLVI	2.40(1.63)	3.92(2.46)	NS	2.34(1	.56) 5.43(2.07)	3.17*		
Adherent by MLVI cutoff	15/25 (60%)	1/5 (20%)	NS	16/27 (!	59%) 0/3 (0%)	NS		

Note. \* p < .05, \*\* p < .01, \*\*\* p < .001. Independent samples t-tests, Fisher's Exact tests, and Mann Whitney U tests utilized. Shaded rows are significant

## The current sample demonstrated significant declines in appointment attendance per year over three years

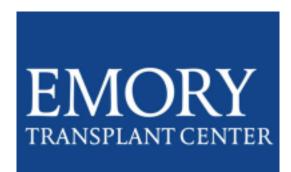


Years post-transfer

Kelly Rea: ker25678@uga.edu | 😏 @kellyerea

Year 3







#### RESULTS

Sample Demographics		M(SD) <i>, n</i> (%)		
Age at transfer (years)		20.62 (0.52)		
Time since Transplant (y	10.47 (5.92)			
Gender (male)		27 (55%)		
Race	White	26 (53%)		
	Black	17 (35%)		
	Asian	3 (6%)		
More that	n one race	3 (6%)		
Ethnicity	Hispanic	4 (8%)		
No	n-Hispanic	45 (92%)		
Insurance in adult care	Private	23 (47%)		
	Public	15 (31%)		
Mult	tiple types	4 (8%)		
	Uninsured	7 (14%)		

- Acceptable model fit
- Significant variation in mean first year appointment attendance, differences among AYA transplant recipients in their initial level of appointment attendance.
- Slope was significant (-0.32, p < .01), demonstrating a significant decline in appointment attendance across 3 years, with significant variation, indicating rate of change for some patients was significantly steeper or flatter.
- Differences in slope or initial attendance not significantly related to age at transfer or time since transplant

### DISCUSSION

- Significant declines in attendance were after initiating adult care, underscoring support for AYAs after transfer.
- Need to examine transition success longitudinally to address changes in healthcare utilization & medical outcomes.
- Attention to interventions and administrative support aimed at maintaining or increasing attendance and identifying risk factors and intervention for unsuccessful transition is warranted.