

Background

- End Stage Liver Disease (ESLD) is a terminal condition with liver transplant (LT) as the sole treatment ¹
- LT recipients are at a higher risk of kidney dysfunction, infection, high cholesterol, diabetes and recurrent liver disease compared to the non-LT populations^{2,3}
- There are currently no standardized guidelines for follow-up care in LT recipients

Objective

Characterize the post-LT care follow-up defined by laboratory measurements in transplant recipients in Virginia

Methods

•**Design/Methods:** Retrospective observational cohort study used data from the Virginia All-Payers Claim Data (VAPCD) from 2016-2021. For frequency description, labs were sub-grouped into 0, 1, 2 or 3+ labs per year. Lab measurements were index to date of transplant.

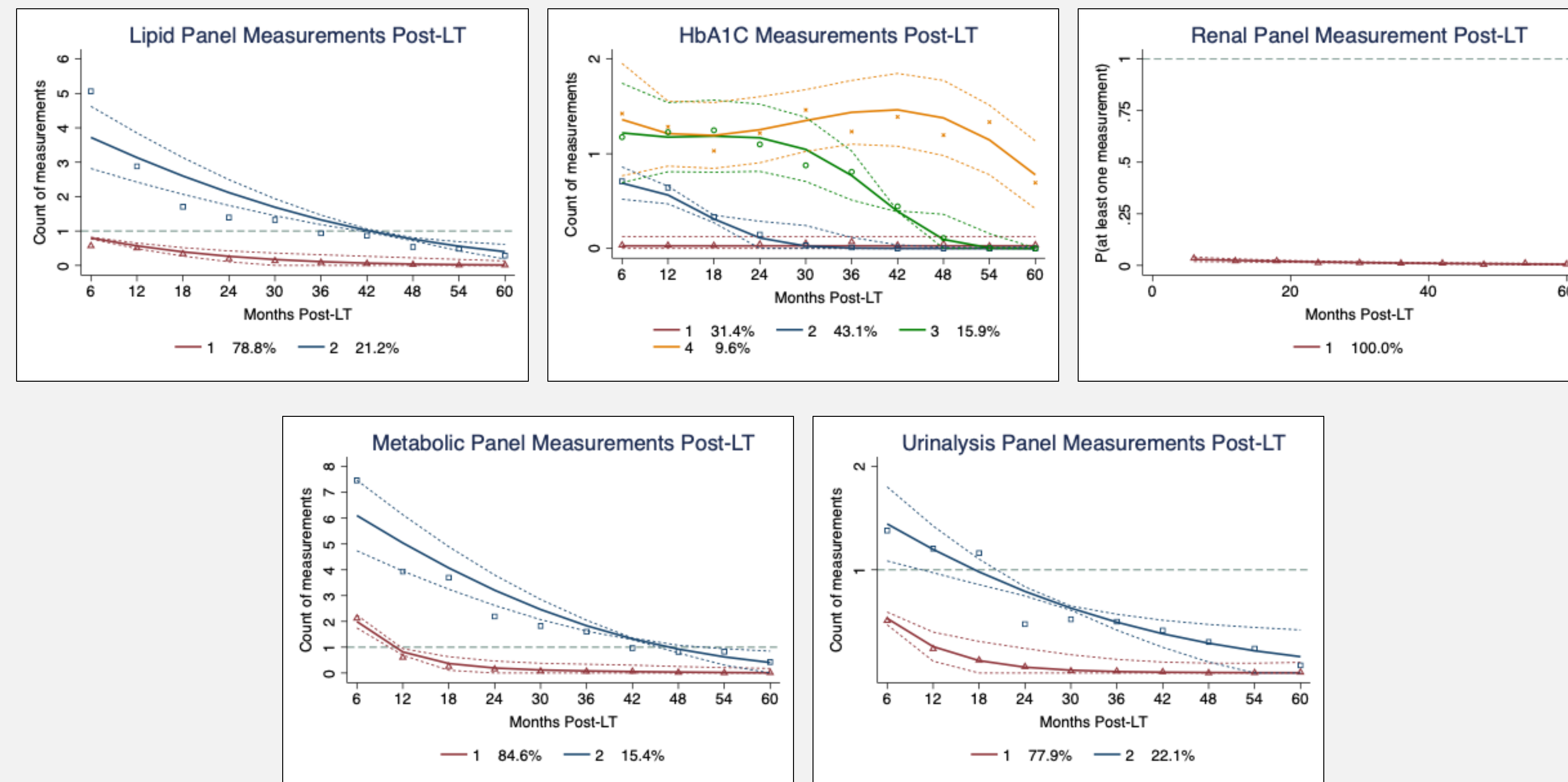
•**Inclusion Criteria:** Individuals that received a LT from 2016-2021 within Virginia were included

•**Exclusion criteria:** Out of State residents that received a LT in Virginia, and individuals who received a LT before 2016 and after 2021 were excluded

•**Statistical analysis:** Descriptive statistics are presented in Table 1 and 2. Group-based trajectory models were estimated to describe the trajectories of care assuming 6-month intervals.^{4,5} Bayesian post-estimations were computed to determine overall model fit and model adequacy

Vast majority of LT recipients are receiving little to no care post transplant

Post-LT Trajectories of Care (HbA1c, Lipid, Metabolic, Renal, and Urinalysis panels)



No lab monitorization likely puts LT-recipients at risk of metabolic decompensation, recurrence of liver disease, and graft failure.

Results

Table 1. Population Characteristics

| Characteristic | LT (N=461) |
|-------------------------|-------------|
| Age, y (SD) | 62.4 (15.3) |
| Female, n (%) | 189 (41.0) |
| Race, n (%) | |
| Caucasian | 248 (53.8) |
| Black/African American | 50 (10.9) |
| Asian | 20 (4.3) |
| Other/Unknown | 143 (31.0) |
| Medical Coverage, n (%) | |
| Medicare | 236 (51.2) |
| Medicaid | 108 (23.4) |
| Geographic Cat, n (%) | |
| City | 78 (16.9) |
| Suburban/Town | 105 (22.8) |
| Rural | 221 (47.9) |
| No Labs post-LT, n (%) | |
| HbA1c | 145 (31.5) |
| Lipid Profile | 116 (25.2) |
| Metabolic Panel | 141 (30.6) |
| Renal Function | 427 (92.6) |
| Urinalysis | 191 (41.4) |

Table 2. Count of Lab Measurements

| Labs | Mean (SD) | CI |
|-------------------|-------------|-----------|
| HbA1c | 0.32 (0.44) | 0.28-0.36 |
| Lipid Profile | 0.48 (0.87) | 0.40-0.56 |
| Metabolic Profile | 0.65 (1.11) | 0.55-0.75 |
| Renal Function | 0.05 (0.36) | 0.02-0.08 |
| Urinalysis | 0.22 (0.37) | 0.18-0.25 |

References & Funding

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