

Impact of Lung Allocation Policy Change on Hispanic Lung Transplant Outcomes: Addressing Disparities and Improving Access

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Introduction: Racial disparities in lung transplantation (LT) outcomes are a significant concern. This study aims to examine the impact of the November 2017 lung allocation policy change (LAPC) on trends and outcomes of Hispanic LT recipients.

Methods: The United Network for Organ Sharing (UNOS) database was used to identify adult (≥ 18 years old) LT recipients between January 2010 and March 2023. Recipients were categorized into 3 self-identified racial groups (Hispanic, non-Hispanic White, and non-Hispanic other). The Mann-Kendall trend test was used to assess the trend in rates of Hispanic LT over 5 years pre- and 5 years post-LAPC. The primary outcome was one year mortality.

Results: A total of 28,495 recipients from 80 centers were included, with 15,343 (53.8%) pre-policy change and 13,152 (46.2%) post-policy change. The racial distribution of LT recipients was pre-LAPC: [Hispanic: 1,013 (6.6%), White: 12,601 (82.1%), Other: 1,729 (11.3%)] and post-LAPC: [Hispanic: 1,522 (11.6%), White: 9,873 (75.0%), Other: 1,757 (13.4%)] ($p < 0.001$). Between 2013 and 2017, the proportion of Hispanic LT recipients increased from 6.0% to 7.6% ($p = 0.221$). Post-LAPC, the proportion increased from 8.5% in 2018 to 14.4% in 2022 ($p < 0.027$). Unadjusted 1-year survival rates were: pre-LAPC: [Hispanic: 88.8%, White: 87.6%, Other: 86.8%, log-rank $p = 0.260$] and post-LAPC: [Hispanic: 90.6%, White: 88.2%, Other: 86.1%, log-rank $p < 0.001$].

Conclusions: The LAPC has led to increased access to LT and improved one-year survival rates among Hispanics. However, efforts should continue to address disparities among other racial groups and ensure equitable outcomes for all recipients of LT.

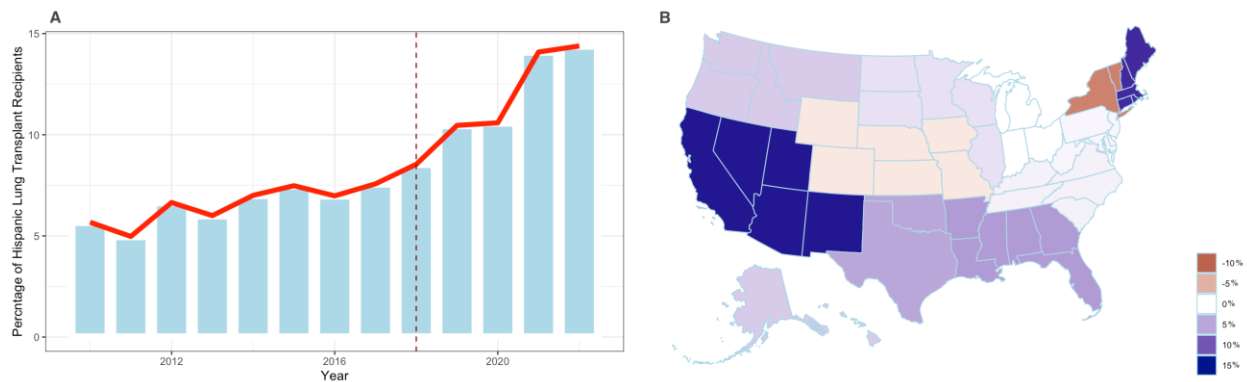


Figure 1: A) Trend of lung transplantation in Hispanic recipients over time in the United States
B) Percentage change in Hispanic lung transplant recipients across UNOS regions after the lung allocation policy change