

Impact of Citizenship Status on Access to Heart Transplantation in the United States

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ABSTRACT

Background: While other disparities in access to cardiothoracic transplantation are well-documented, there has been little analysis of the role that citizenship status plays in influencing access to transplantation. This is undoubtedly linked to wider transplant disparities concerning race and socioeconomic status; however, there is still a need to identify the direct effect of citizenship status alone on access to cardiothoracic transplantation.

Methods: To elucidate access to the transplantation waitlist we utilized multivariable ordinal regression, using higher acuity group status at the time of listing as the proxy measure of worse access to the waitlist. We developed and utilized a directed acyclic graph to elucidate causal relationships and as the basis of confounder adjustments. This is a novel approach within cardiothoracic disparity work that seeks to more accurately address health disparities affecting protected classes.

Results: Preliminary results show that even when adjusted for insurance status and other socioeconomic variables, non-Citizens are placed on the waitlist at higher priority status (Adjusted OR = 0.39; CI = 0.38-0.41; $p < 0.001$). Post-transplantation outcomes between the two groups show no significant differences.

Conclusions: To our knowledge, this research will be the first body of work to investigate the association between these variables. While prior studies have characterized insurance-based disparities in transplantation and other contexts, it is apparent that non-citizens face a much broader set of potential disadvantages which may amplify any insurance-based effect. These results will have important implications for policy advocacy for insurance coverage and transplantation access for the non-Citizen demographic.