# Title: Race and Ethnicity Disparities in Post-Arrest Care in Texas

# ABSTRACT

## Introduction:

Post-arrest care is essential to the chain of survival after out-of-hospital cardiac arrest (OHCA). Sparse literature evaluates disparities in post-arrest care. We sought to measure post-arrest care disparities using a statewide OHCA registry.

## Methods:

We evaluated 2014-2020 data in the Texas Cardiac Arrest Registry to Enhance Survival (TX-CARES) and included adult OHCAs surviving to hospital admission. We stratified subjects by race/ethnicity. Outcomes were targeted temperature management (TTM), percutaneous intervention (PCI), early withdrawal of life-sustaining therapies (WLST), survival to discharge, and survival with cerebral performance category (CPC) of 1-2 (considered favorable). We used both multivariable and mixed-effects, logistic regression models to evaluate the association between race/ethnicity and outcomes, adjusting for confounders. We modeled receiving hospital as a random intercept for the mixed-models analysis.

## **Results:**

We included 8,363 OHCAs; 3,916 White, 2,251 Black, 2,196 Hispanic/Latino. On multivariable analysis, Black patients had a lower PCI (aOR 0.4, 95% CI 0.3-0.5) and survival with good CPC (aOR 0.6, 95% CI 0.5-0.7). Hispanic/Latino patients had lower TTM (aOR 0.8, 95% CI 0.7-0.9), PCI (aOR 0.7, 95% CI 0.5-0.9), survival (aOR 0.8, 95% CI 0.7-0.9), and survival with good CPC (aOR 0.7, 95% CI 0.6-0.8). However, after adjusting for clustering by receiving hospital, most of the post-arrest care relationships were negated, and Black patients actually had a higher rate of TTM (aOR 1.2, 95% CI 1.04-1.4).

#### **Conclusions:**

Minority OHCA victims experienced disparities in post-arrest care and outcomes. However, adjusting for receiving hospital random-effect largely diminished these findings. Inter-hospital, post-arrest care disparities may exist.

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