

# Addressing Healthcare Disparities in Patients Undergoing Cervical Spine Surgery

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#### BACKGROUND

#### **Problem Statement:**

Patients of racial/ethnic minorities undergoing Cervical Spine Surgeries face greater challenges in their post-operative courses compared to their White counterparts.

#### Project AIM:

Improve hospital length of stay and readmission rates for patients of non-White racial/ethnic backgrounds following Cervical Spine surgeries

Interdisciplinary Team: Departments of Neurology, Neurosurgery, and Physical Medicine and Rehabilitation

#### DATA COLLECTION

- A Data Query was compiled from the Jefferson Epic/EMR:
- All patients within the Thomas Jefferson Center City Department of Neurosurgery who underwent Cervical Spine Surgeries (based on CPT codes), between 01/01/2018-06/01/2021.
- Total of 2025 patients, 298 patients readmitted within 30 days to the Emergency Department at TJUH

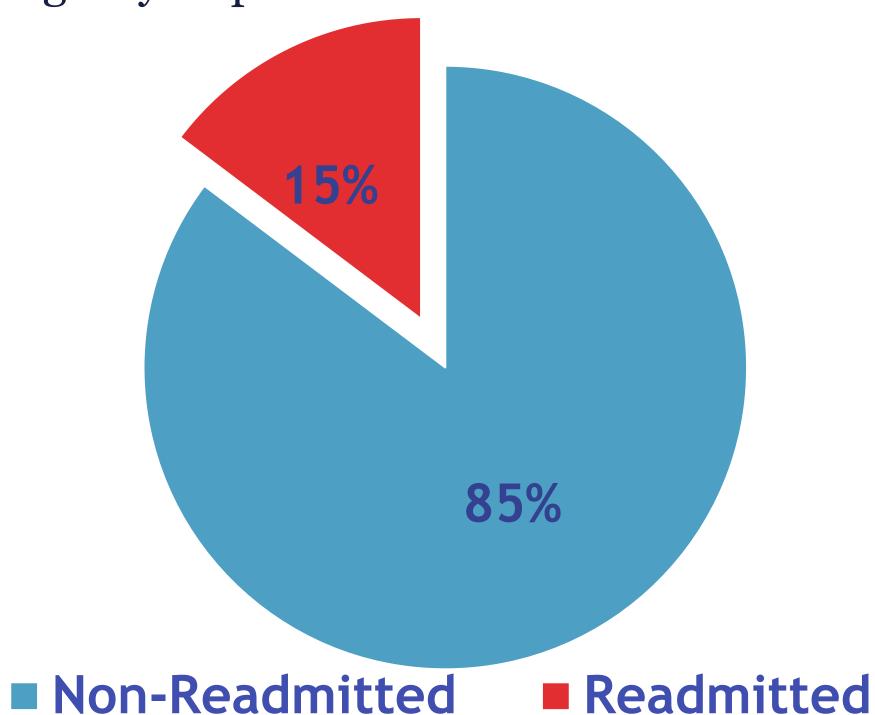
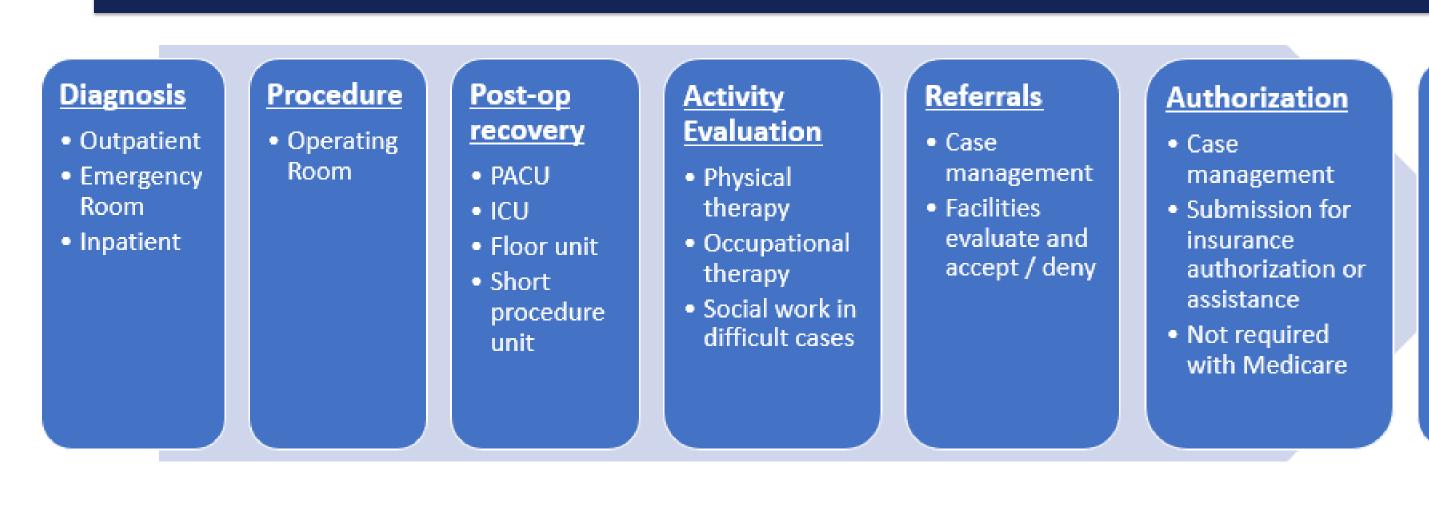


Fig 1: Total Readmission Rates within 30 days



# RESULTS

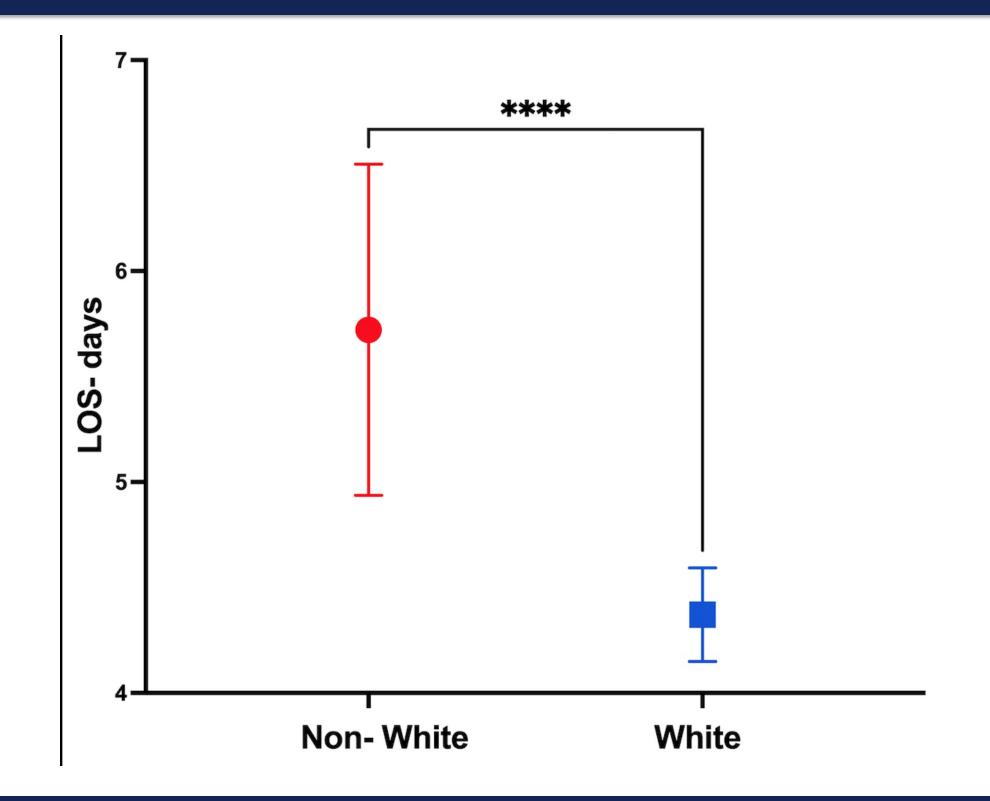


Fig 2: Higher Initial Length of Stay in Non-White Population

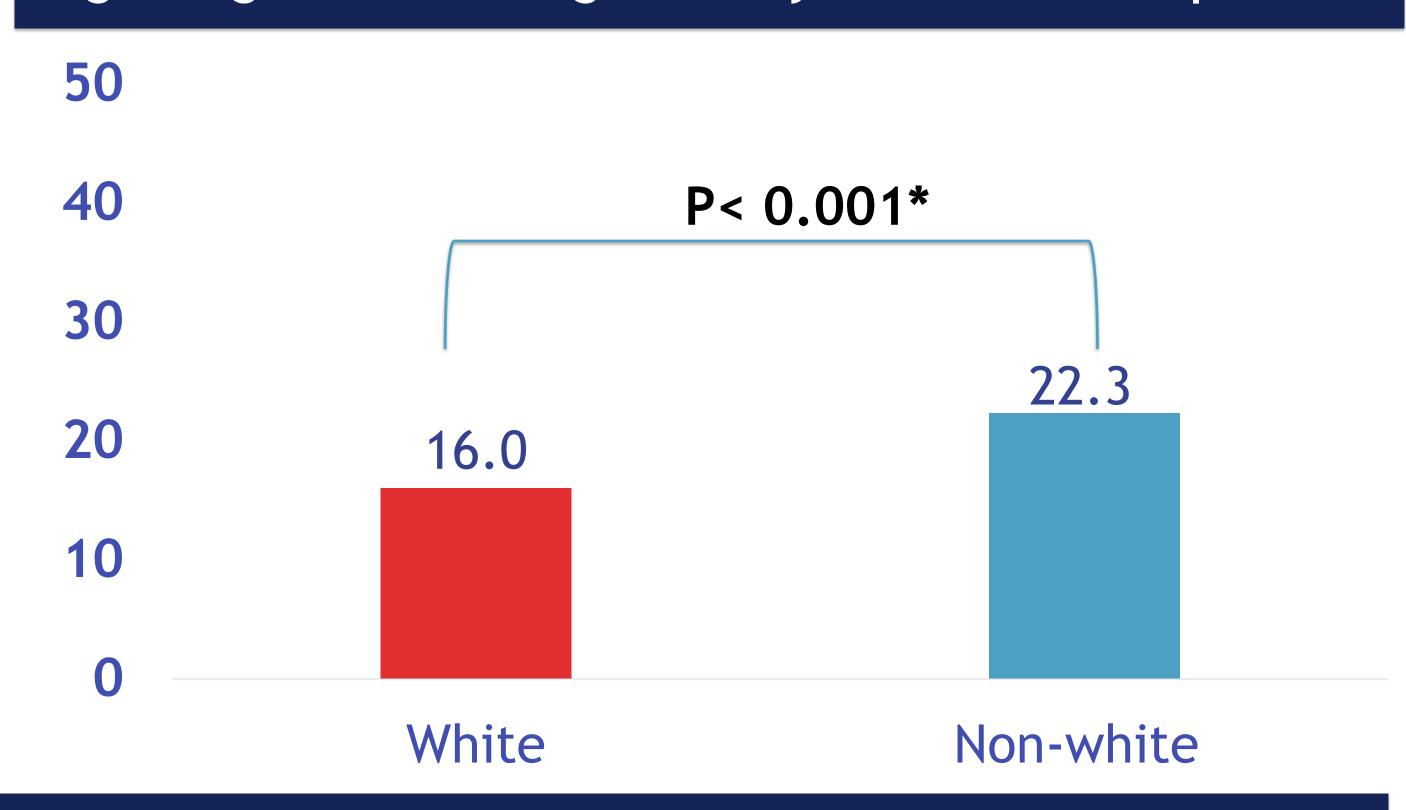


Fig 3: Higher Percentage of Non-White Patients Readmitted

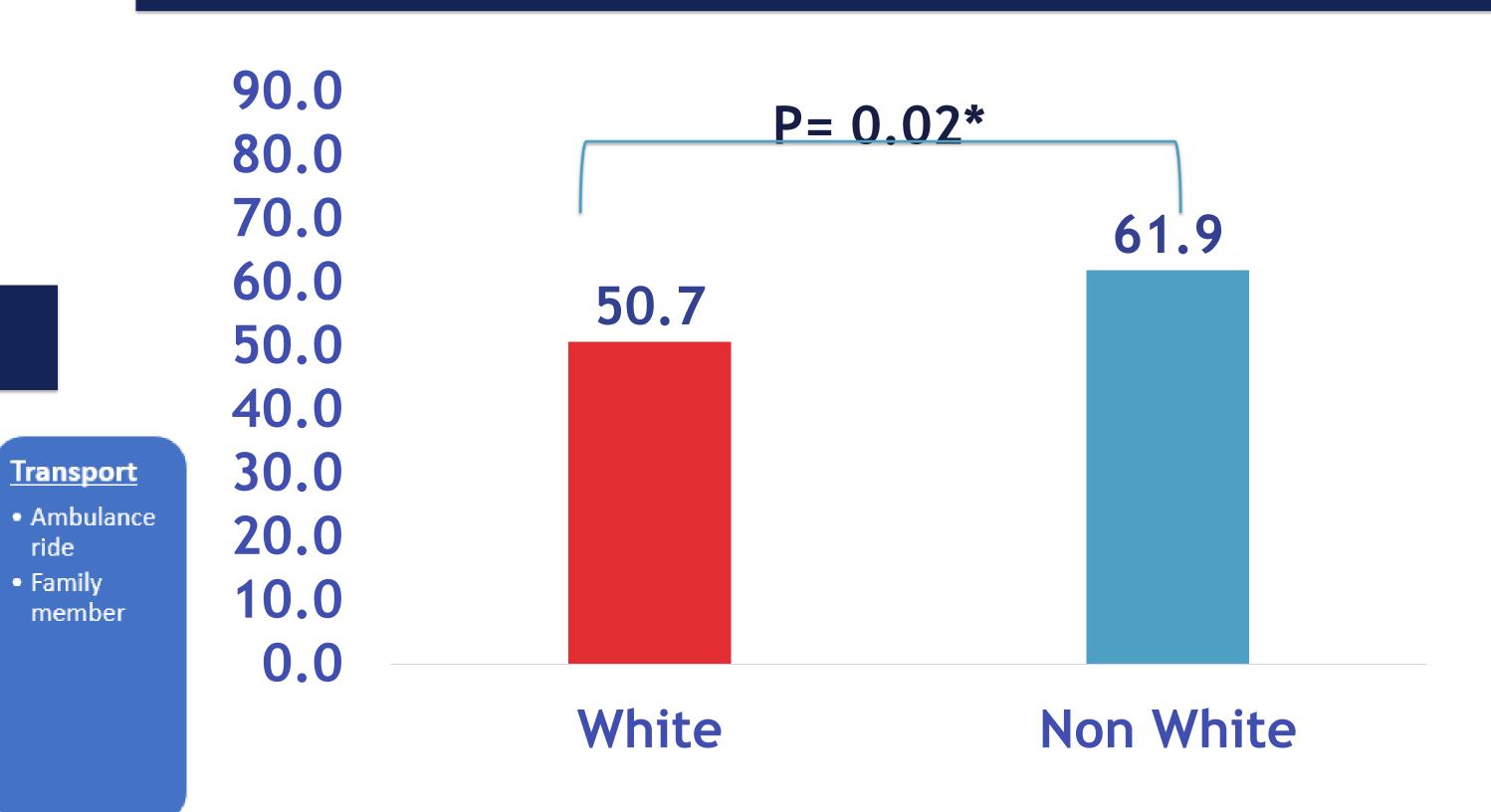


Fig 4: Higher Percentage of Non-White Patients Discharged Elsewhere than Home

#### DISCUSSION

- Increased Length of Stay for Non-White patients
- Increased Readmission Rates for Non-White patients
- Increased Rates of Discharge Elsewhere than Home (Rehab, or other) for Non-Whites

## CHALLENGES, LESSONS LEARNED, LIMITATIONS

- Data Collection Timeline and Analysis
- Project Intervention Planning and Implementation

#### GOALS

- Decrease Hospital Length of Stay for Minority populations by 20% over the next 12 months.
- Decrease Readmission Rates for Minority populations by 20% over the next 12 months.

#### **FUTURE DIRECTIONS**

- Implement project intervention Possibly: Implement Discharge Hard-Stop to assess adequate post discharge pain control
- Further investigate discharge planning process
- Process investigation for barriers to discharge and rationale for readmission rates
- Similar Results also for Elderly patients, which could prompt a separate or concurrent intervention

#### LINKAGE TO HEALTHCARE DISPARITIES

- Target pain control assessment in Minority populations
- Target multi-disciplinary rounding with case management for high-risk re-admission

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Family