



# EQUITY IN BURN PATIENTS' CARE: THE EXPERIENCE OF A BURN UNIT ON CLINICAL OUTCOMES MEASUREMENT

Lizbey Andrea Gómez, Health Outcomes Manager

## INTRODUCTION

Caring for burn patients is complex due to the severity and potential complications, requiring timely, specialized care, adequate resources, and coordination. Organizations like the Institute for Healthcare Improvement (IHI) highlight the importance of applying the Fivefold Aim to improve care, focusing on high-quality, patient-centered treatment, cost control, and equitable access regardless of socioeconomic status. This project analyzes clinical outcomes of patients treated in the Burn Unit at Fundación Santa Fe de Bogotá, based on insurance type, occupation, and place of origin.

## METHODS

Data from adult and pediatric burn patients treated in 2023 and 2024 were collected through medical records, including sociodemographic and clinical variables (age, sex, city, insurance, occupation, burn cause, extent, and depth). Outcomes assessed included graft integration, severity-adjusted mortality (ABSI for adults, Baux index for children), and hospital stay. Descriptive statistics and Chi-square tests were used for analysis.

## RESULTS

A total of 446 patients were included, 82.3% were adults and 17.7% children; 65.2% were male. The median age was 39 years for adults and 4 years for pediatric patients. Regarding burn depth, 24% had Grade II superficial burns, 43% had Grade II deep burns, and 33% had Grade III burns.



### TYPE OF INSURANCE

Contributory: 81%  
Subsidized: 17%  
Special regimen: 2%



### SOURCE

Bogotá: 54%  
Other cities: 46%



### PERCENTAGE OF TOTAL BODY SURFACE AREA BURNED

0-10%: 70%  
11-20%: 21%  
≥21%: 9%



### ETIOLOGICAL AGENT

Thermal: 73%    Electrical: 15%  
Chemical: 11%    Other: 1%

Burns occurred mostly at home (41%) and work (39%), with 20% happening elsewhere.

Grafting had a 95.1% success rate across 185 cases. Average hospital stay was 11.2 days, with an overall mortality of 1.6%. Severity-adjusted mortality was 0.2 in adults and 0.3 in children, with a target to keep both rates at or below 1%. Chi-square analysis showed no significant association between:

**Mortality** and insurance ( $p=0.9$ ), origin ( $p=0.5$ ), or employment ( $p=0.8$ )

**Graft integration** and insurance ( $p=0.9$ ), origin ( $p=0.7$ ), or employment ( $p=0.2$ )

**Hospital stay** and insurance ( $p=0.2$ ) or employment ( $p=0.4$ )

## CONCLUSIONS

No significant associations were found between mortality, graft integration, or hospital stay and factors such as insurance type, geographic origin, or employment status. The Burn Unit consistently achieves strong clinical outcomes across all socio-demographic groups, positioning the institution as a national benchmark in delivering comprehensive, accessible, and high-quality care. In addition, prevention and education initiatives are essential to reduce the incidence of burns, along with public policies that ensure fair and equitable resource distribution.

