

Introduction

- Traumatic breast injuries have not been well described and available literature is limited.
- Trauma to the breast can result from penetrating, blunt, or burn mechanisms.
- Surgical interventions are not common but may be associated with severity and traumatic mechanisms.
- Louisiana has one of the highest rates trauma related mortality. Traumatic breast injuries have not been well studied in this region.

Aims of Study

- **Primary Aim:** Compare incidences of breast injuries in high-risk crime areas vs non-high risk crime areas.
- **Secondary Aim:** Perform a comparison of patient's demographic information, insurance status, injury severity, outcomes and follow up.

Methods

- Retrospective chart review of adult, female patients presenting with traumatic breast injuries to a Level 1 trauma center from 2016-2022.
- Zip Codes of injury location were collected and divided into high-risk zip codes and non-high risk zip codes.

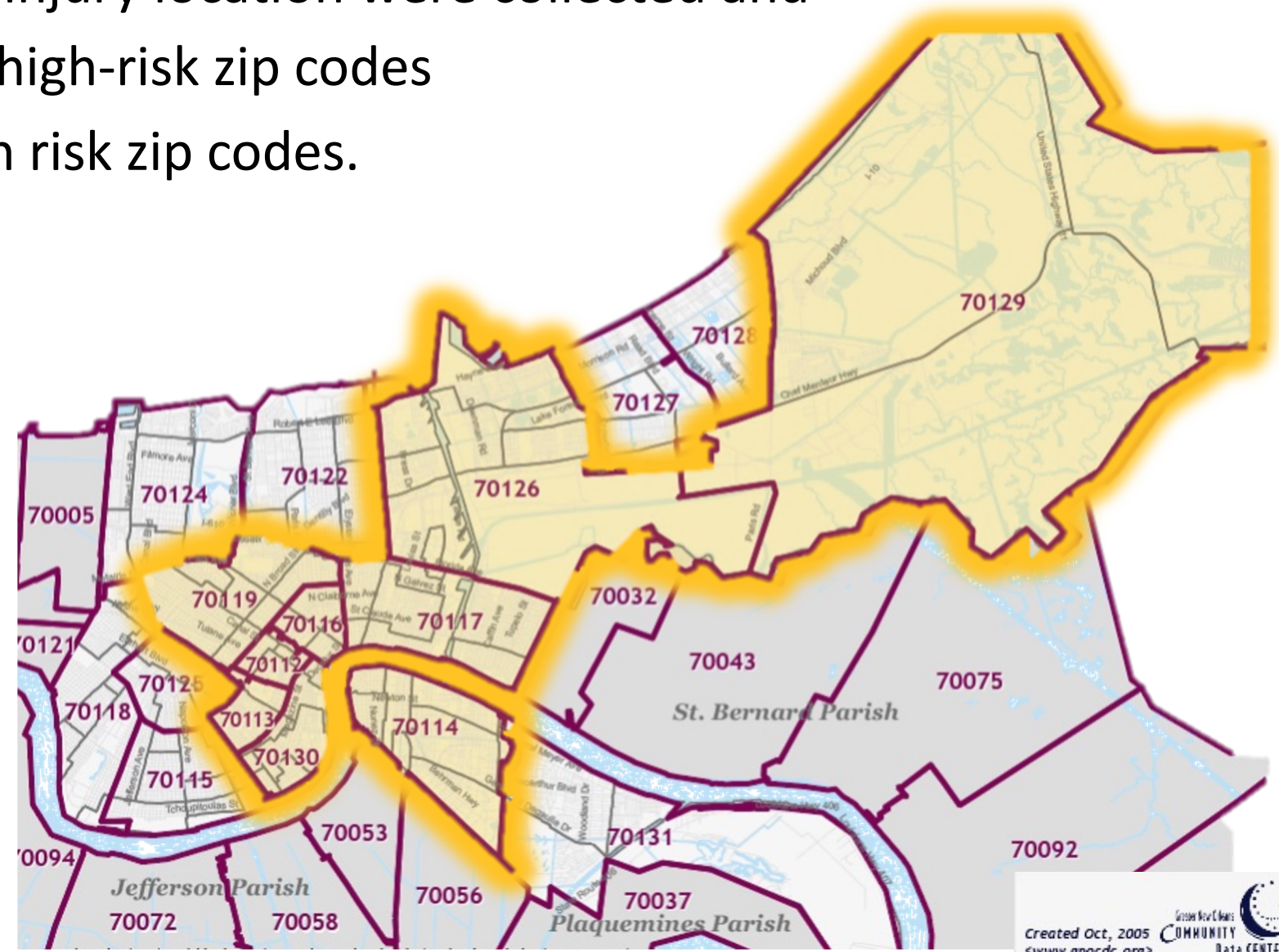


Figure 1. Zip code map with highlighted high-risk areas

Results

Table 1. Patient Demographics

Demographics	High-Risk Zip Code N=18	Non-High Risk Zip Code N=29	P-value
Age, average yrs (SD)	35.0 (9.8)	45.2 (17.4)	0.03*
African American, n (%)	17 (94)	13 (45)	0.0005*
Caucasian, n (%)	1 (6)	14 (48)	0.003*
Hispanic, n (%)	0	2 (7)	0.52
Private Insurance, n (%)	2 (11)	9 (31)	0.16
Medicare/Medicaid, n(%)	15 (83)	20 (69)	0.32
Uninsured, n (%)	1 (6)	0	0.38
Penetrating trauma, n (%)	14 (78)	16 (55)	0.14
New Injury severity score, avg (SD)	5.6 (5.2)	10 (9.3)	0.07

Table 2. Follow-Up of Patients

Specialty	High-Risk Zip Code N= 18	Non-High Risk Zip Code N=29	P-Value
Trauma Surgery, n (%)	4 (22)	7 (24)	1
Other (PCP, plastics, ortho), n (%)	2 (11)	10 (34)	0.1

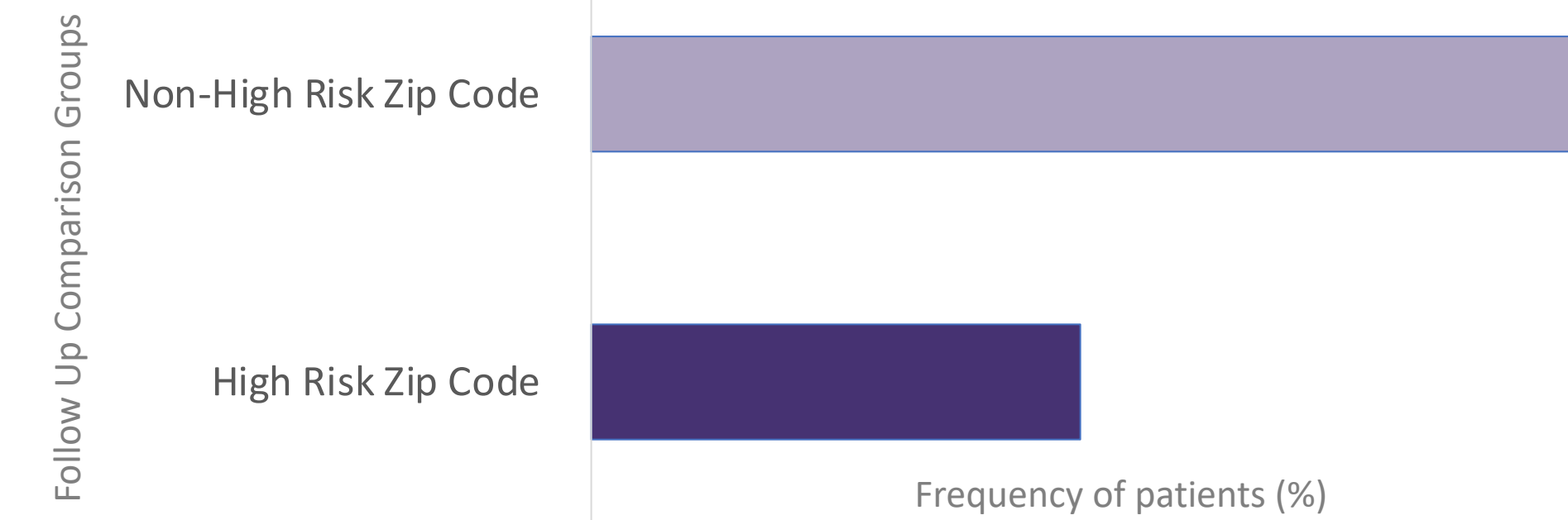


Figure 3. Follow up after traumatic breast injuries

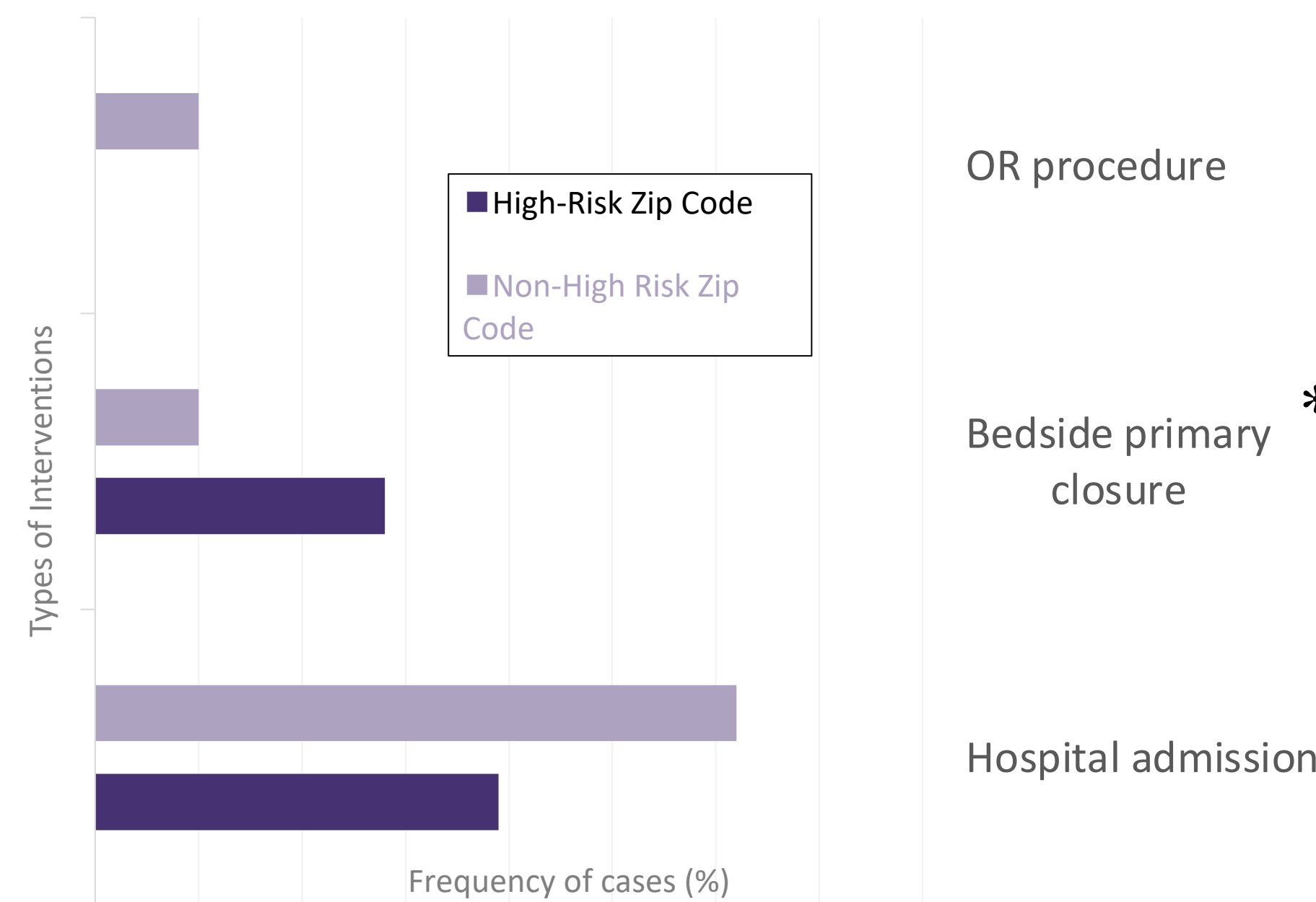


Figure 2. In-hospital outcomes for patients with traumatic breast injuries
*p<0.05

Conclusion

This study suggests that there are differences in demographics between traumatic breast injuries when comparing high-risk vs non-high risk crime locations. These high-risk crime locations can represent target areas for outreach in prevention.

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