

Racial and Ethnic Disparities in Same-Day Discharge Following Appendectomy in Children

Gwyneth A. Sullivan; John Sincavage; Audra J. Reiter; Andrew J. Hu; Melissa Rangel; Charesa J Smith; Ethan M. Ritz; Ami N Shah; Brian C Gulack; Mehul V. Raval

Division of Pediatric Surgery, Department of Surgery, Northwestern University Feinberg School of Medicine, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL, USA

Division of Pediatric Surgery, Department of Surgery, Rush University Medical Center, Chicago, IL, United States

BACKGROUND

- Racial and ethnic disparities exist in outcomes following surgery in children
- Same day discharge (SDD) following appendectomy is safe with no increased risk of 30-day readmission or complications

RESEARCH OBJECTIVES

To determine whether race and ethnicity are associated with rate of SDD and post-discharge healthcare utilization including emergency department (ED) visits and readmissions in children with acute, uncomplicated appendicitis.

METHODS

NSQIP-Pediatric clinical registry from 2015-2019

Inclusion criteria

- < 18 years old who underwent appendectomy

Exclusion criteria

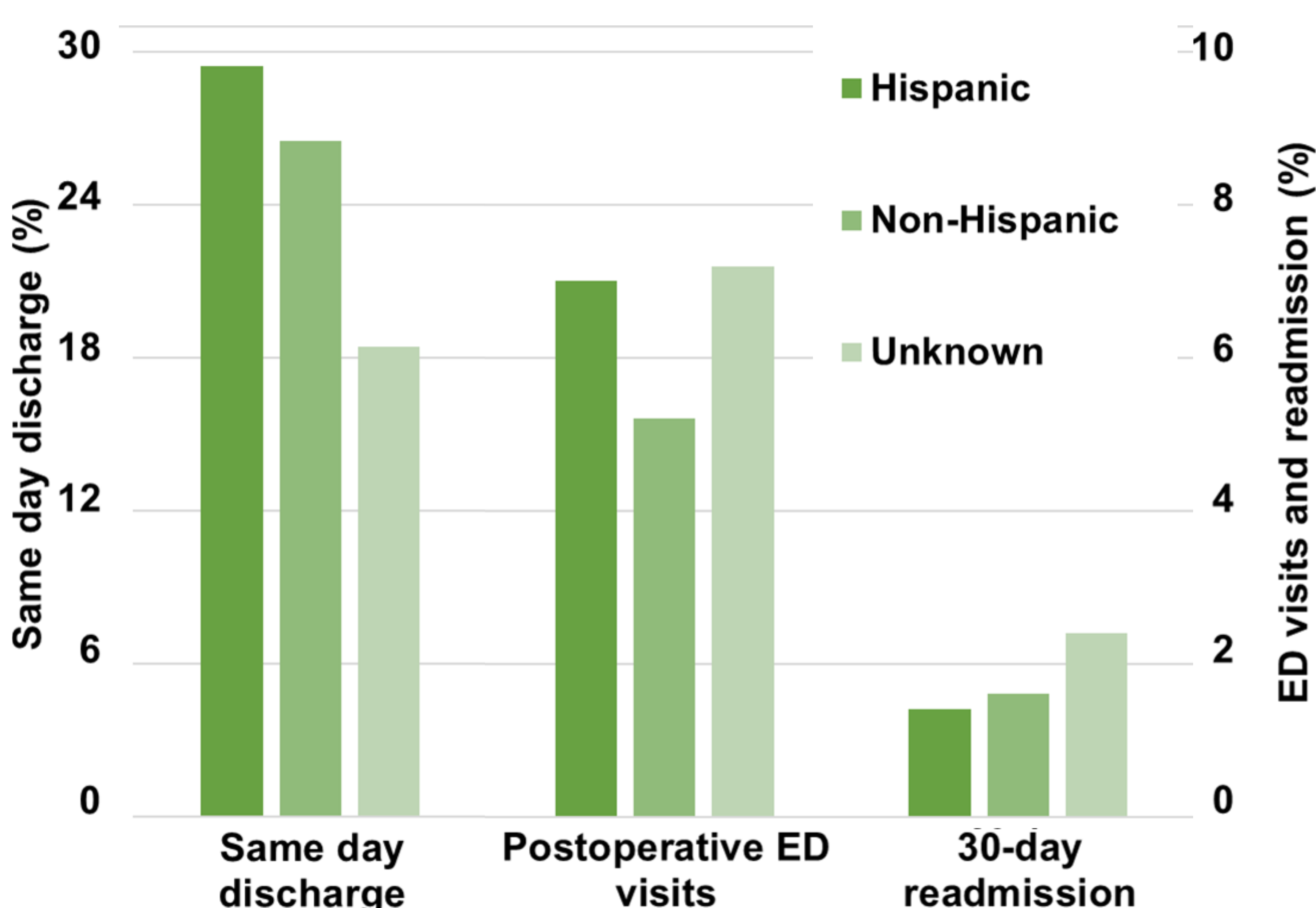
- Perforated or complicated appendicitis
- Hospital length of stay > 1 day

Study variables

- Exposure: race and ethnicity
- Primary outcome: same day discharge
- Secondary outcome: hospital utilization (ED visits and 30-day readmission)

RESULTS

Figure 1. Outcomes by ethnic group

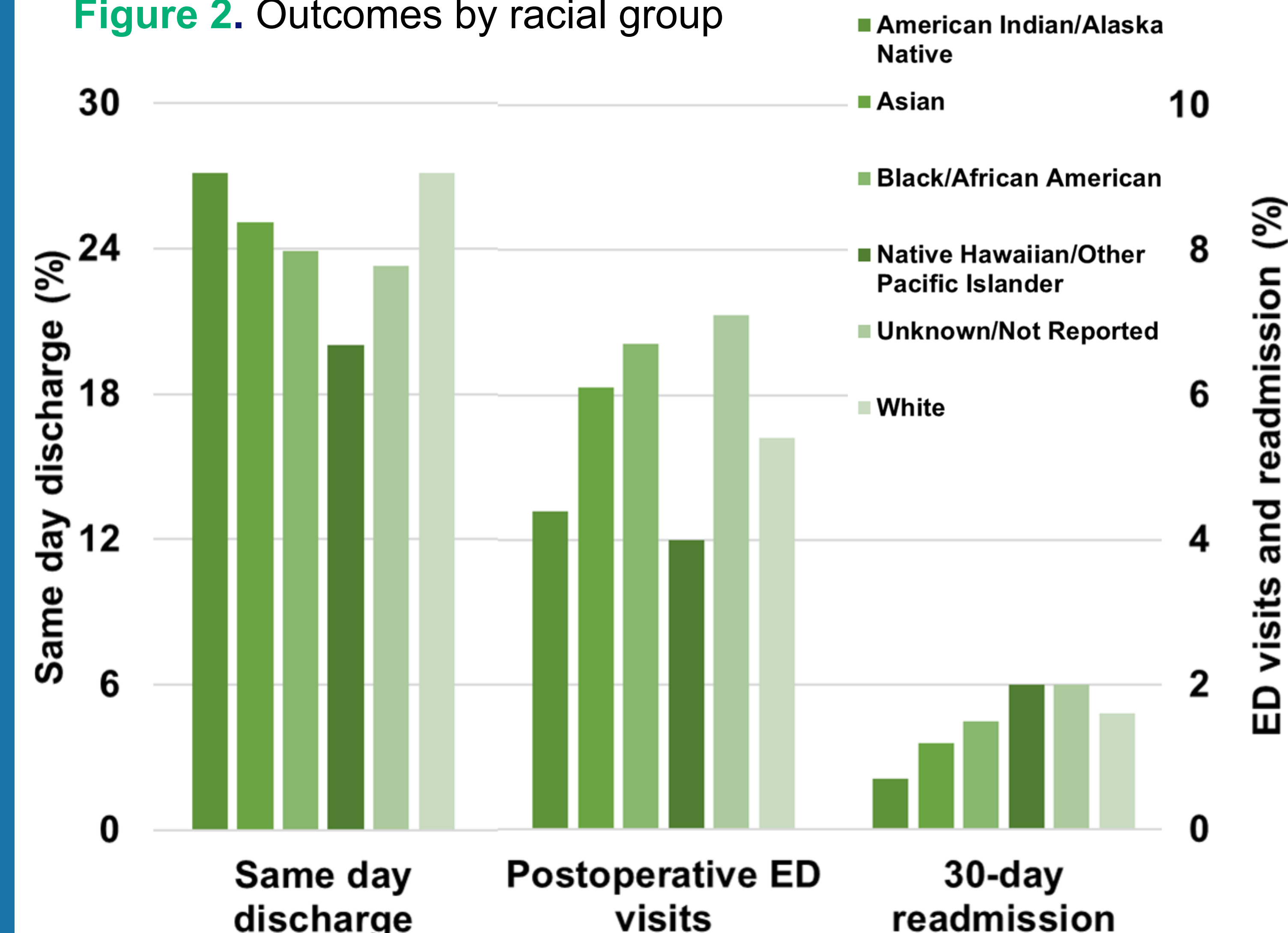


Racial and ethnic groups have differing rates of same day discharge with lower rates in Black/African American patients and highest overall rates in White Hispanic children

Same day discharge protocols need to be tailored to meet the unique needs of our diverse patient populations to facilitate equitable delivery of care

RESULTS (cont.)

Figure 2. Outcomes by racial group



Same day discharge

- Black/African American** patients have **decreased likelihood** of SDD compared to White patients (aOR 0.84; 95% CI: 0.77-0.93)
- Hispanic** patients had **increased likelihood** of SDD compared to Non-Hispanic patients (aOR 1.19 95% CI: 1.12-1.25)

ED Visits

- Black/African American** patients have **increased likelihood** compared to White patients (aOR 1.36; 95% CI: 1.14-1.62)
- Hispanic** patients have **increased likelihood** compared to Non-Hispanic (aOR: 1.37; 95% CI 1.12-1.58)
- No association between SDD and ED visits

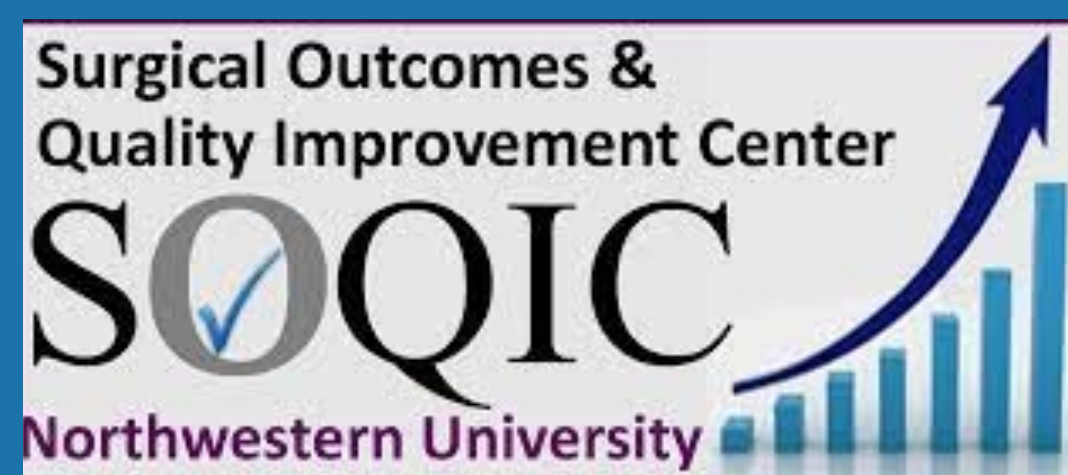
Readmission

- No racial group association
- Hispanic** patients had **decreased likelihood** compared to Non-Hispanic (aOR: 0.77; 95% CI: 0.62-0.95; p<.01)

No association between SDD and ED visits or readmission

LIMITATIONS

- Follow-up outside of NSQIP hospitals may not be captured
- Relationship between time of day of presentation and preoperative length of hospitalization
- Further information on sociodemographic information and social determinants of health



@WynSullivan

gwyneth.sullivan@northwestern.edu