



Socioeconomic Determinants Of Surgical Risk: ADI-Driven Analysis Of Brachioplasty Outcomes

Meeti Mehta, BS; Alexander Comerchi, BS; Nerone Douglas, MD; Viraj Govani, BA; Jeffrey Gusenoff, MD; J. Peter Rubin, MD, MBA

The Department of Plastic Surgery, University of Pittsburgh, Pittsburgh, Pennsylvania



BACKGROUND

- Brachioplasty is increasingly sought after by MWL patients to address skin laxity.
- SES is known to impact health care access, but its impact on surgical outcomes is understudied.
- This study examines how neighborhood-level SES impacts brachioplasty outcomes.

METHODS



Figure 1. Area Deprivation Index (ADI).

- MWL brachioplasty patients from 2003-2023 were included.
- Multivariate regression analysis, controlling for confounders.
- Primary outcomes:** readmission, reintervention, postoperative complications, time to follow-up

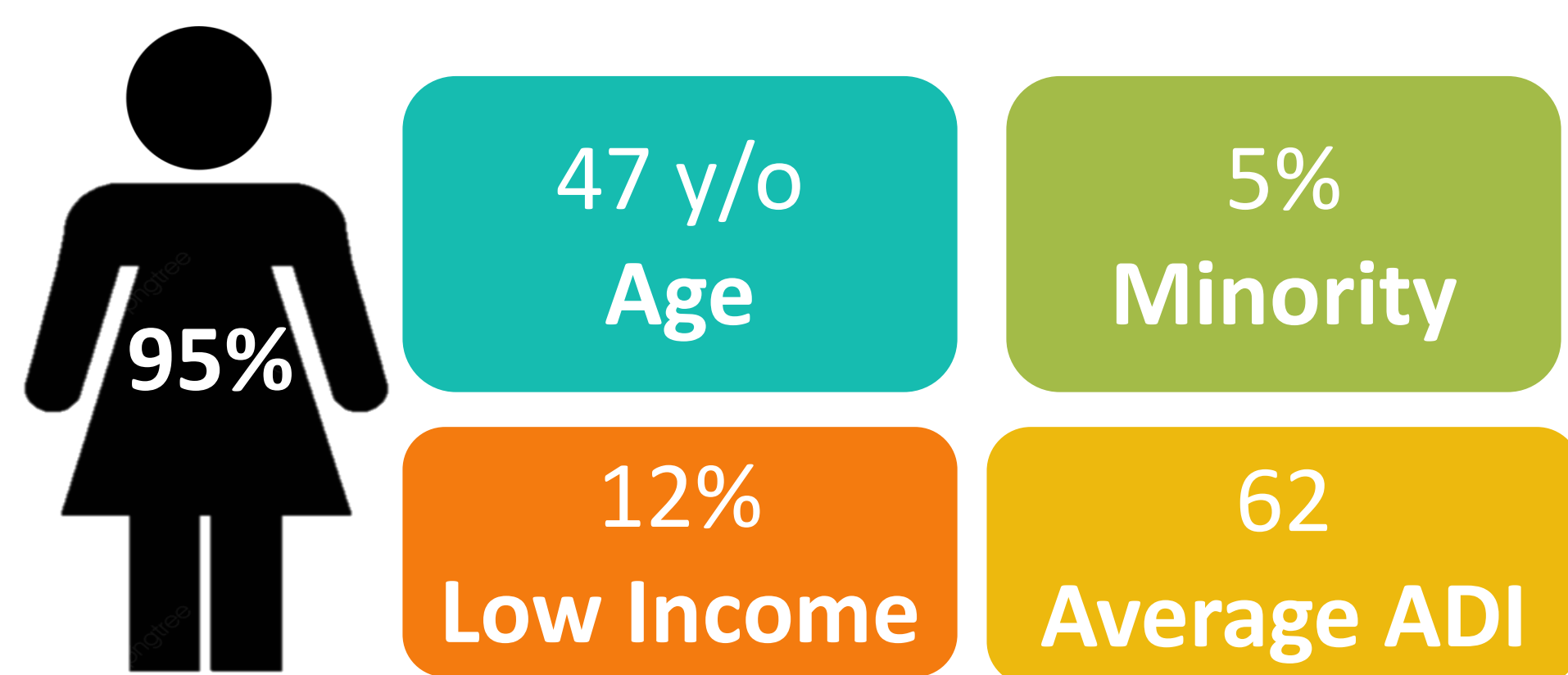
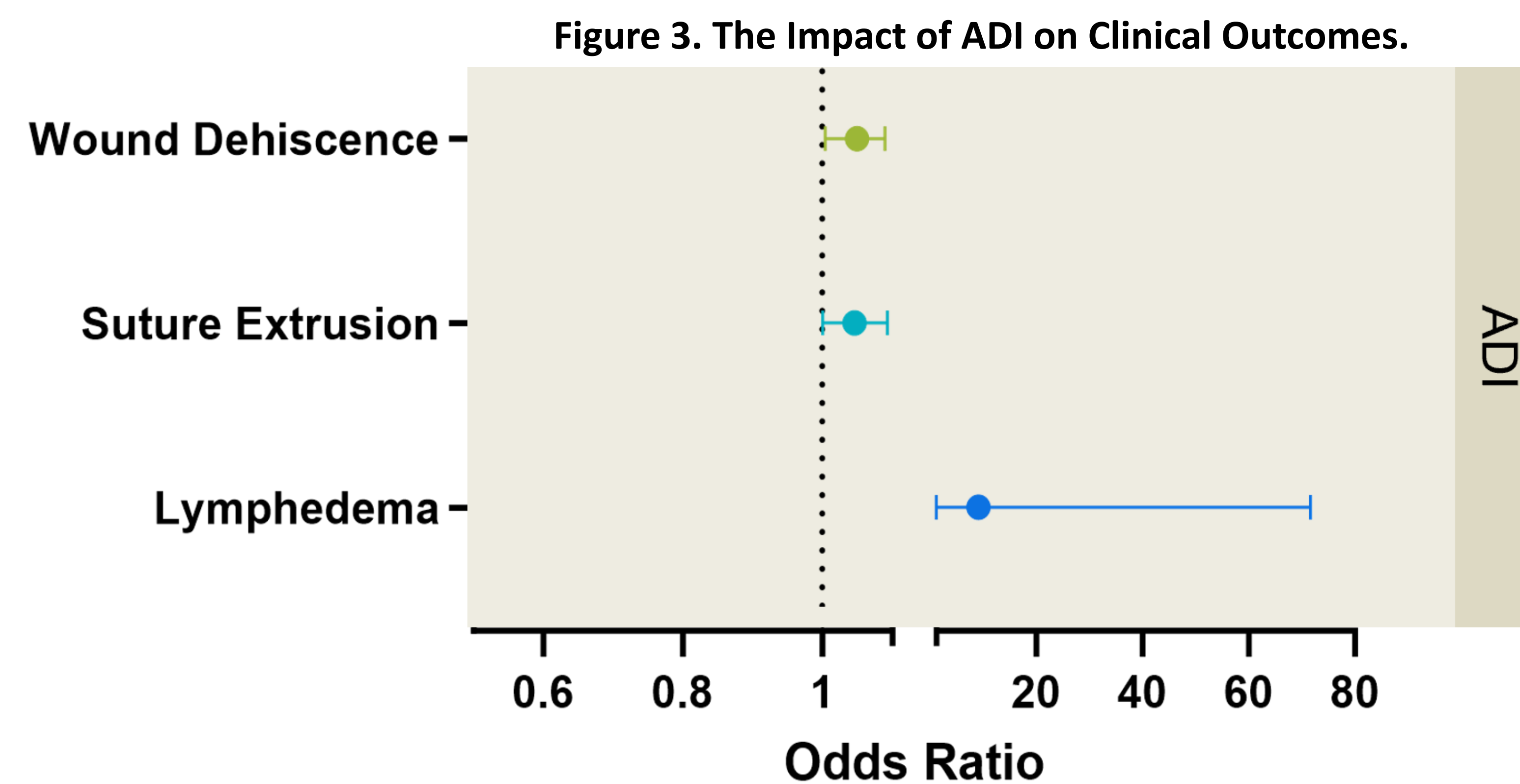
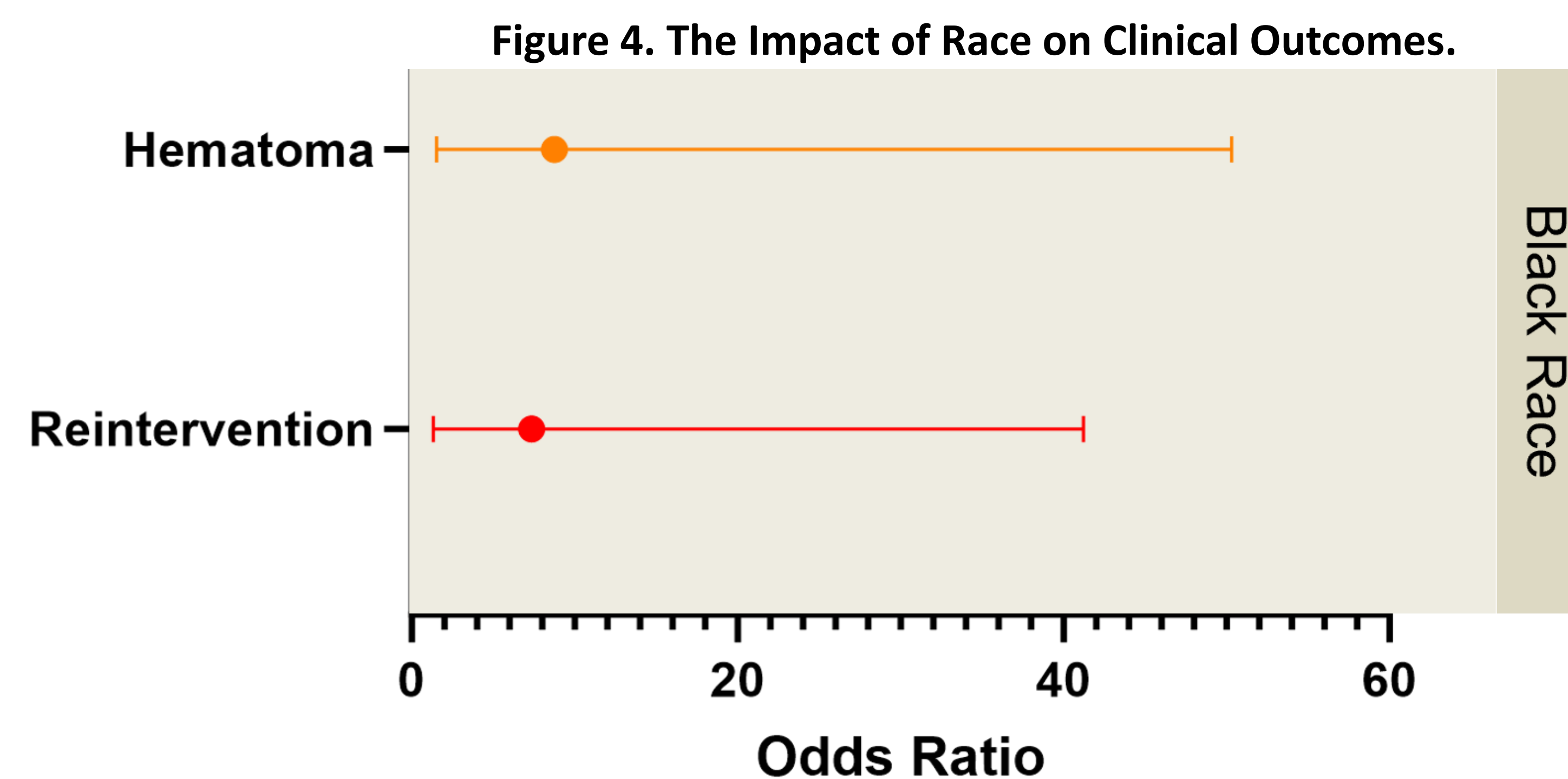


Figure 2. Cohort Demographics.

RESULTS



Higher ADI is linked to earlier follow-up visits after surgery.



Lower household income is linked to earlier follow-up visits after surgery.

Older age is linked to a greater reintervention rate due to complications.

RESULTS

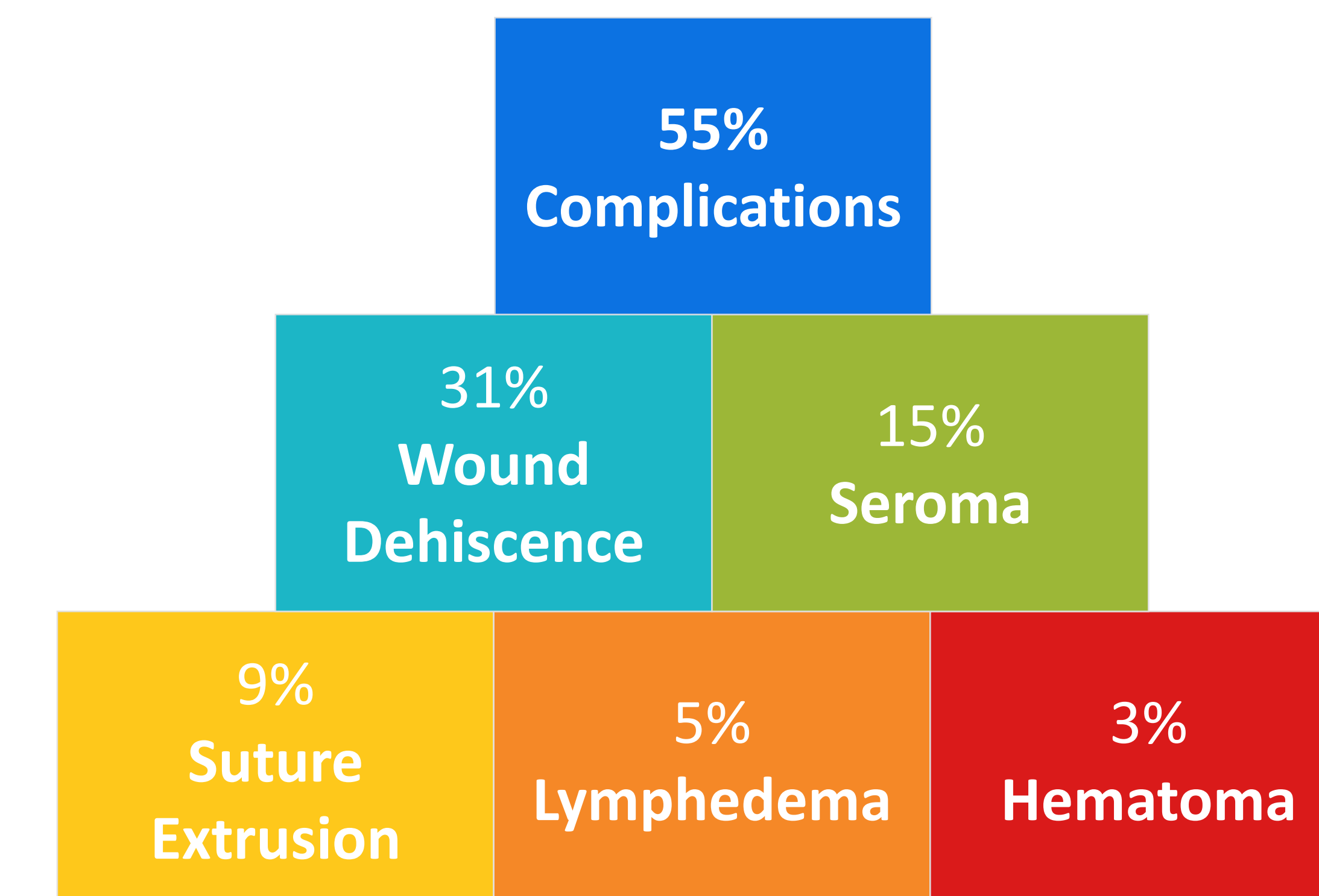


Figure 5. Cohort Complications.

- Disadvantaged patients (**high ADI** or **low income**) were more likely to have **earlier follow-up visits**.
- Disadvantaged patients (**high ADI** or **minority race**) were more likely to have **postoperative complications**.
- Disadvantaged patients (**minority race** or **older age**) were more likely to undergo **reintervention** for complications.

CONCLUSIONS

- SES factors, particularly neighborhood deprivation, play a significant role in brachioplasty outcomes.
- Incorporating ADI into routine clinical assessments can help us develop targeted strategies that consider the diverse social determinants influencing patients' clinical outcomes.