



# Disparities in Access to Postmastectomy Breast Reconstruction: Does Living in a Specific ZIP Code Determine the Patient's Journey?



Nerone K.O. Douglas MSc; Samyd S. Bustos MD; Alejandro Munoz-Valencia MD; Elizabeth A. Moroni MD, MHA; Carolyn De La Cruz MD

Department of Plastic Surgery, University of Pittsburgh Medical Center, Pittsburgh, PA

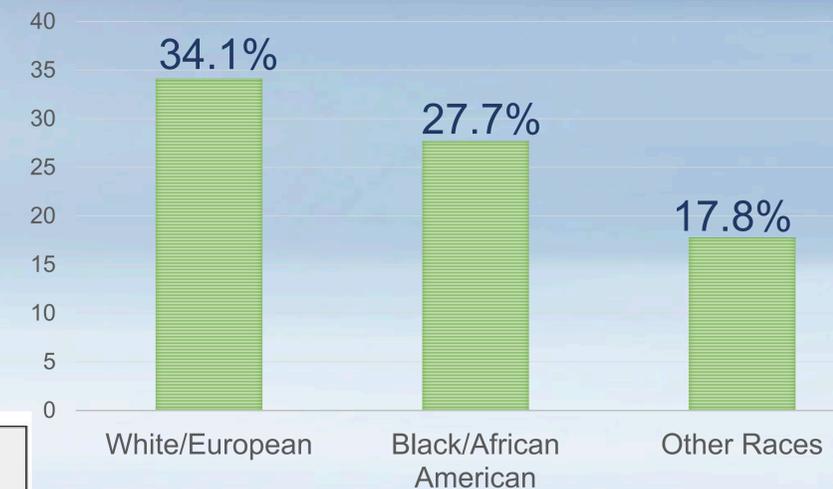
## Background

- Postmastectomy breast reconstruction is considered an integral part of breast cancer treatment. It aims to surgically restore the breast mound, which has been shown to provide long-term quality-of-life and psychosocial benefits.
- Despite the policies initiated to improve access to breast reconstruction, its delivery continues to be inequitable, suggesting that barriers of access persist and have not been fully identified or addressed.

## Results

- 2,528 (43.3%) underwent whole breast resection for cancer (nipple-sparing, modified, total, or radical mastectomy)
- 846 patients (33.5%) pursued breast reconstruction:
  1. 242 (28.6%) autologous
  2. 407 (48.1%) implant-based
  3. 164 (19.4%) a combination of autologous and implant-based
  4. 33 (3.9%) were not specified
- Patients who underwent breast reconstruction came from ZIP codes that:
  1. Had approximately 2,000 USD average annual income
  2. Had higher percentage of White population (8% vs. 11% non-White population)
  3. Had lower percentage of Black or African American population (1.8% vs. 2.9%)

### RATES OF RECON BY RACE

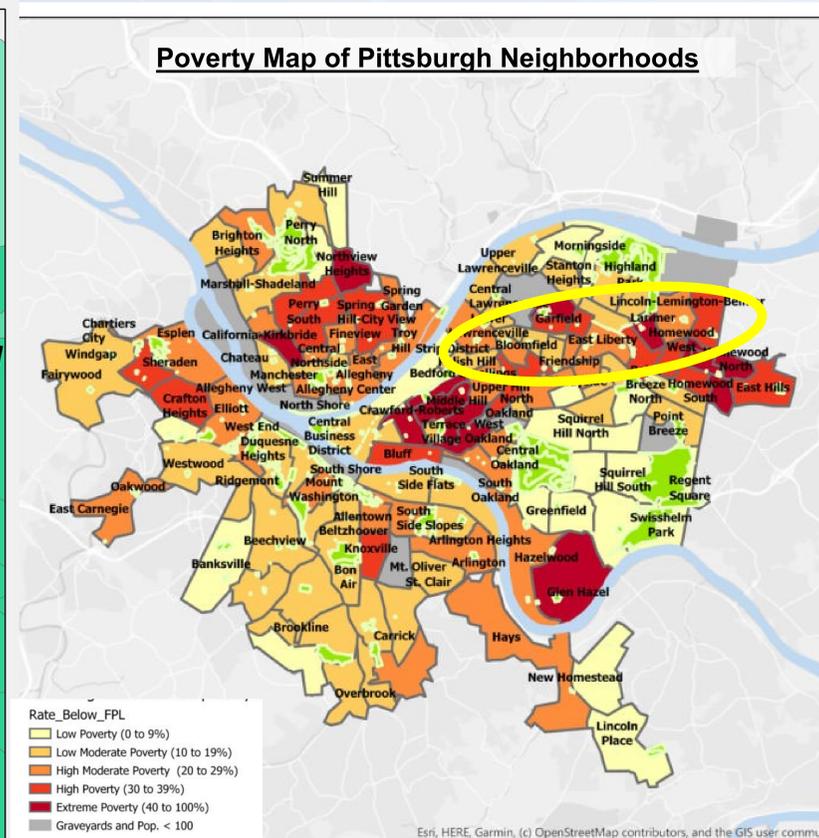
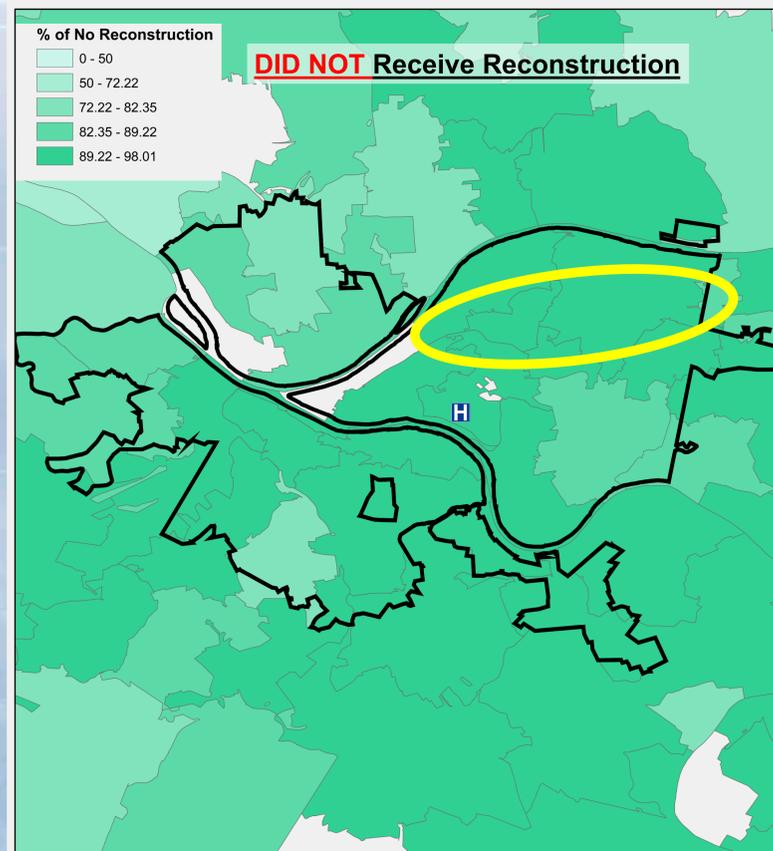


## Aim

The purpose of this study is to assess the influence of ZIP codes, socioeconomic status, and race in access to breast reconstruction.

## Methods

- 5,835 total patients underwent mastectomy/reconstruction at UPMC Magee-Women's Hospital from 2014 to 2019.
- Retrospective chart review
- A geographical analysis was conducted using demographic characteristics including ZIP codes and county-level information
- Euclidean distance from patient home ZIP code to Magee Hospital was calculated using ArcMap 10.7 software.



## Conclusion

- While the use of postmastectomy breast reconstruction has been steadily rising in the United States, **racial and socioeconomic status disparities persist.**
- Increasing culturally concordant educational materials, advocacy, and sociopolitical awareness within our surgical community could bring us closer to providing equity in comprehensive breast cancer treatment.

## Contact Information



Nerone K.O. Douglas, MSc  
 Medical Student at University of Pittsburgh School of Medicine  
 douglas.neronekiyoshiomari@medstudent.pitt.edu