

## Structural and Systemic Racism in CoC Cancer Center Locations: Proximity may not Equal Access to Cancer Care

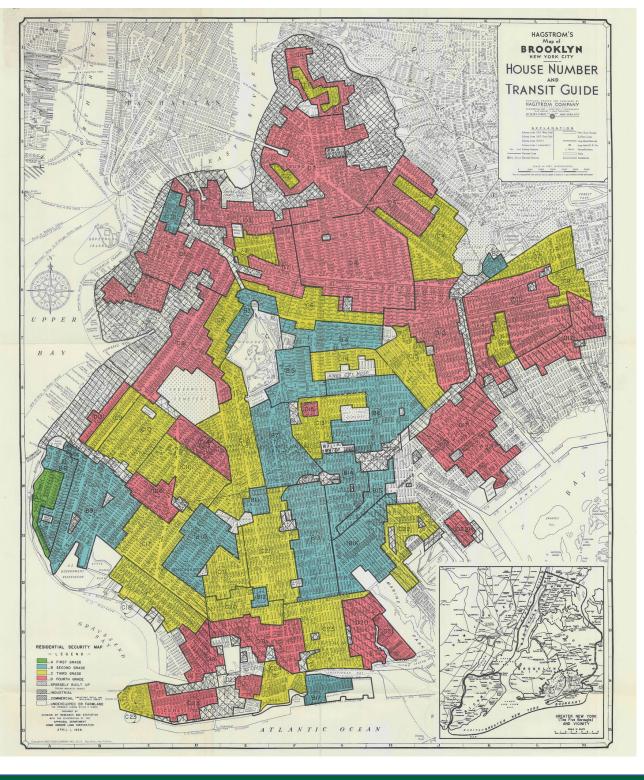
## Background

### Redlining

- A historic policy from the 1930s and the FHA's New Deal that unjustly deemed mortgages in and around predominately Black neighborhoods risky and therefore refused to insure them, without any backing
- Forced Black Americans into urban housing projects, creating essentially a state-sponsored form of segregation
- We continue to feel the long-term effects of redlining: Black wealth is only 5% of white wealth despite Black incomes being 60% of White incomes

### **Cancer Care**

- Patients in previously redlined districts • were less likely to receive breast cancer screening
- Colorectal cancer patients in predominately Black segregated communities have increased mortality and decreased receipt of surgery compared to White counterparts



## Objectives

- 1. Study the differences between the racial demographics of the neighborhoods of CoC-accredited cancer programs and their larger metropolitan area to determine if hospitals are located in predominately White areas.
- Understand the racial demographic discrepancies between hospital 2. neighborhoods and the actual populations they serve.

### Methods

- CoC-accredited hospitals were identified via the American College of Surgeons CoC website and were geocoded using ArcGIS.
- Using 2020 US Census data, overall, White, and Black population was determined for 1) the Core Based Statistical Area (CBSA) in which hospitals were located and 2) the hospitals' immediate neighborhood (10-mile radius around the hospital).
- Percentage-point differences and ratios of White and Black populations between the CBSA and hospital neighborhood were analyzed. Results were stratified by the four US Census Regions 1) Northeast, 2) South, 3) Midwest, and 4) West.
- Secondary analysis utilized publicly available hospital admissions data to compare racial demographics between hospital patients, hospital neighborhood, and CBSA.

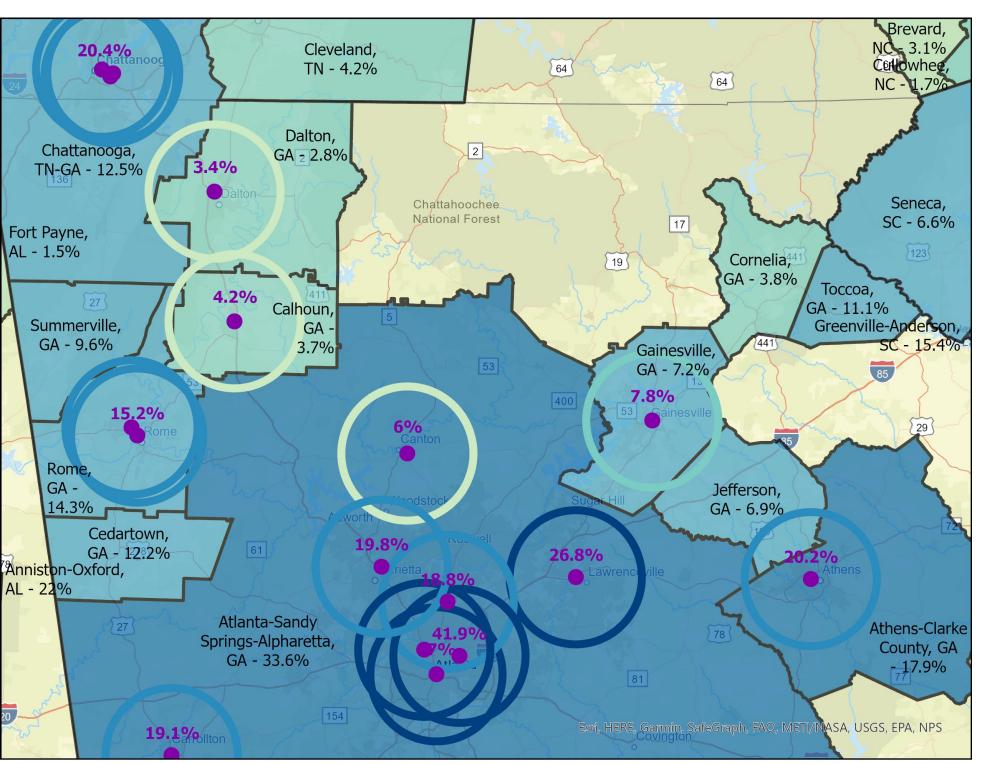
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Hospital Neighborhood : CBSA	Northeast	South	Midwest	West
White Percentage-Point Difference *	-4.4 (-13.6 – 5.5)	-4.8 (-10.6 – 2.3)	-4.5 (-11.7 – 0.2)	-1.1 (-6.2 – 3.6)
Black Percentage-Point Difference *	+0.5 (-5.3 – 5.0)	+2.7 (-2.2 – 8.6)	+1.7 (-2.0 – 7.5)	+0.1 (-1.6 - 0.9)
White Ratio †	0.9 (0.8 – 1.1)	0.9 (0.8 – 1.0)	0.9 (0.8 – 1.0)	1.0 (0.9 – 1.1)
Black Ratio †	1.1 (0.6 – 1.9)	1.3 <i>(0.8 – 1.5)</i>	1.4 (0.8 – 1.8)	1.1 (0.7 – 1.4)
* Neighborhood percentage – CBSA percentage. Median (IQR)				

**†** Neighborhood percentage / CBSA percentage. Median (IQR)

# Table 1: Hospital Neighborhood Demographics Comparison. IQR for both White and Black ratio across all four



### Legend

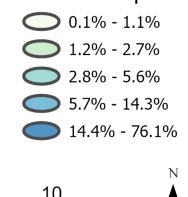
CoC Hospital CoC Hospital

### 10 mile buffer

% Black Population (quintiles) 0.2% - 2.9% 3% - 7.3%

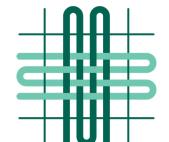
- 7.4% 13.8% 🥏 13.9% - 22.6%
- 🔵 22.7% 74.9%

Metro/Micropolitan Statistical Area % Black Population (quintiles)



## **Conclusions and Future Directions**

- CoC-accredited centers appear to be predominately located in neighborhoods representative of the larger metropolitan/micropolitan area that they belong to.
- Secondary analysis suggests hospitals may fail to serve a diverse patient population that is similar to the communities they live in
- Future Plans: We plan to leverage hospital level admissions data to further understand whether hospital cancer patient populations are representative of their neighborhood demographics



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### Results

Census regions suggest hospital neighborhood demographics are similar to those of their associated CBSA.

Figure 2: Percent Black population in both CBSA and in several hospital neighborhoods in the Georgia/North Carolina region. Refer to figure legend for further info. Note the overlap of hospital neighborhoods between CoC hospitals. Radius around each center represents 10 miles.