Disparities in Breast Cancer Screening and Diagnosis: Urban-Suburban Contrasts in the Wake of the COVID-19 Pandemic

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PURPOSE

Compare the impact and recovery from the COVID-19 pandemic on breast cancer screening and diagnosis in urban and suburban communities

METHODS

- Retrospective cohort study
- Volume of screening and diagnostic mammograms, breast biopsies, and breast cancer diagnoses from 1/1/2019 to 12/31/2022
- Subset comparison of urban-suburban sites from 1/1/2019 to 12/31/2021

CONCLUSIONS

- **Disproportionate effect on breast health services at urban sites**
  - **Greater volume losses**
  - **Weaker recovery and lesser degree of resurgence**
  - **Larger proportions of cancer post-pandemic**
- **Persistent reduction in diagnostic mammograms and biopsies post-pandemic at all sites**
- **Essential to improve access to breast health services to mitigate the pandemic's impact on cancer detection**
  - **Address radiologist shortage in breast imaging**
  - **Increase focus on urban patients**

RESULTS

Screening Mammograms

- In 2020, decreased 23.9% at urban sites and 1.6% at suburban sites
- Recovery in 2021 with volume surpassing pre-pandemic levels at urban and suburban sites by 2.6% and 31.0% respectively
- Volume at all sites rising through 2022

Diagnostic Mammograms

- In 2020, decreased 26.4% at urban sites and 21.4% at suburban sites
- Poor recovery in 2021 with volume at urban sites dropping further to 28.5% below pre-pandemic levels and mild suburban recovery reaching 16.9% less than pre-pandemic levels
- In 2022, continued slow recovery with all site volume totals still 21.7% below pre-pandemic levels

Breast Biopsies

- In 2020, decreased 32.4% at urban sites and 20.8% at suburban sites
- Partial recovery in 2021 with biopsy volume at urban sites reaching 15.1% less than pre-pandemic levels and suburban sites 14.7% less than pre-pandemic levels
- Greater proportions of invasive ductal carcinoma and ductal carcinoma in situ by 16.3% and 15.9% at urban sites in 2021 compared to 2019
- Volume improving in 2022 with biopsies at all sites remaining 5.6% less than 2019