

Evaluation of Geographic Access Disparities to Digital Breast Tomosynthesis

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Purpose

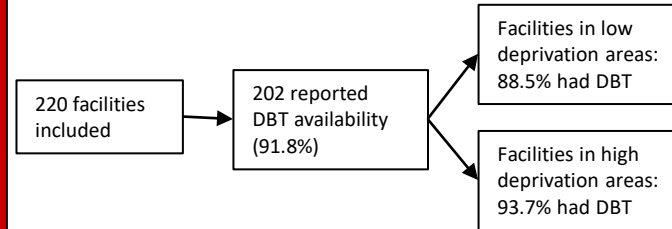
To evaluate the effects of neighborhood deprivation at the zip code level on access to FDA accredited breast imaging facilities with digital breast tomosynthesis (DBT).

Methods

- Area deprivation index (ADI) values were obtained from the University of Wisconsin Neighborhood Atlas®, which ranks zip code-level socioeconomic disadvantage across the United States.
- Disadvantage was dichotomized (high ≥97th national ADI percentile, low ≤3rd ADI percentile).
- Among FDA accredited breast imaging facilities, a random sample was obtained, stratified by ADI values.
- Facilities were contacted and asked about DBT availability, out-of-pocket DBT fees, transportation assistance, and appointment availability.

Results

Table 1: Baseline Demographic Features

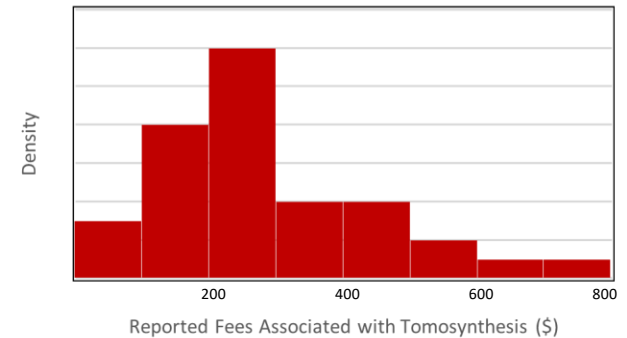


No difference in DBT availability between facilities in low and high deprivation areas (p=0.178).

Table 2: Accessibility of DBT in facilities in low- and high-deprivation areas

	Facilities in Low Deprivation Areas	Facilities in High Deprivation Areas	P-value
DBT utilized for all patients	73.3%	63.6%	0.190
DBT available on weekends	50.0%	23.1%	<0.001
DBT available in evenings	28.1%	21.4%	0.317
Transportation services available	13.8%	14.8%	0.861

Table 3: Reported fees associated with tomosynthesis



Among facilities reporting DBT fees, costs ranged from \$0 to \$750 (median \$250), with no significant difference in average cost between high and low ADI zip codes (p=0.977).

Conclusions

- High proportions of breast imaging facilities in areas with low and high levels of deprivation have DBT.
- No difference in cost between high and low deprivation areas may reflect a greater financial burden for those in higher deprivation areas.**
- Reducing financial costs and increasing evening/weekend appointment availability may increase the routine utilization of DBT.