Identifying breast cancer screening service gaps: A combined geographic and demographic approach

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Background
- In breast cancer, early detection is key to favorable survival outcomes.
- Proximity to a mammography facility can be a driving factor in likelihood of screening.
- The Georgia Breast and Cervical Cancer Program (BCCP) provides breast cancer screening to uninsured women aged 40-64 below 200% poverty.

Methods
- All cases were geocoded based on patient address.
- Cases were subset based on age at diagnosis and stage of cancer.

Results
- Among women 40-64 there was no difference in overall percentage of late stage diagnoses in low access/high need counties, as a group, from that of remaining counties.
- Areas with low access to facilities do not seem to correspond to areas with high late stage incidence.
- Among counties with high BCCP eligibility:
  - Early stage breast cancer: 67%
  - Late stage breast cancer: 30%
  - Unknown/unstaged: 3%
- Among counties with low BCCP eligibility:
  - Early stage breast cancer: 67%
  - Late stage breast cancer: 30%
  - Unknown/unstaged: 3%

- Only 6 counties classified as low access/high need had proportions of late stage diagnoses in highest quartile.
- 6 more counties had proportions in 2nd highest quartile.
- Conversely, 10 counties containing mammography facilities and low BCCP eligibility had high proportions of late stage breast cancer.

Areas of Focus
- High BCCP eligibility, no facilities, high percentage late stage (6 counties)
  - Access/availability issues?
- Low BCCP eligibility, has facilities, high percentage late stage (10 counties)
  - Education/awareness issues?
  - Access issues if poor county?
- High BCCP eligibility, no facilities, low percentage late stage (8 counties)
  - Population characteristics?

Implications
- Use of U.S. Census county demographic profile data regarding sex, age, poverty, and educational attainment can explain some of these findings.
- Data from the GA Comprehensive Cancer Registry may assist in directing services to areas and populations with true need.

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