



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 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
 - Special focus on women aged 50-64



Purpose of Study

- Certain areas of Georgia have higher proportions of women who qualify for BCCP services but reside in counties that have no mammography facilities
- Do women in these low access/high need counties experience higher proportions of late stage breast cancer diagnoses?



Methods

- Data collected from the GA Comprehensive Cancer Registry for all breast cancer diagnoses between 2003-2007
- 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



Results

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%



Results

- Only six counties classified as low access/high need had proportions of late stage diagnoses in highest quartile
- Six more counties had proportions in second 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?

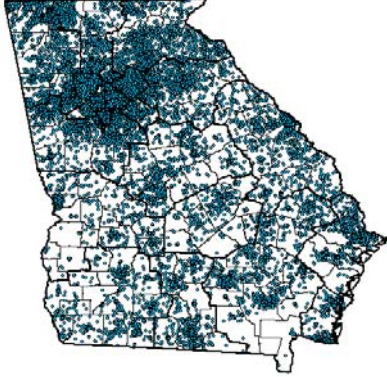


Implications

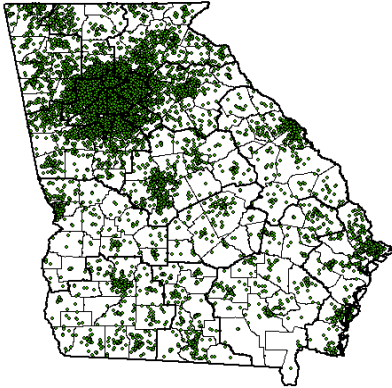
- Use of U.S. Census county demographic profile data regarding sex, age, poverty, and educational attainment can explain some of these findings
- Data from the GA Comprehensive Cancer Registry may assist in directing services to areas and populations with true need



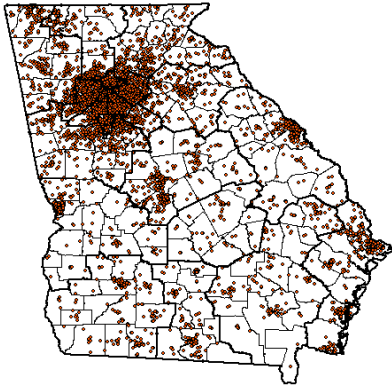
Georgia BCCP Clients: Screened 2003-2007 (Breast only)

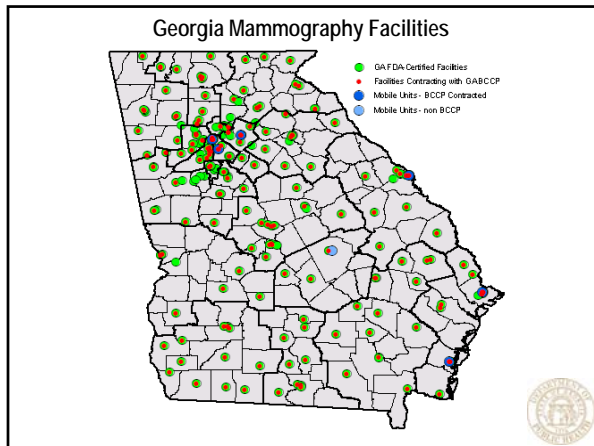


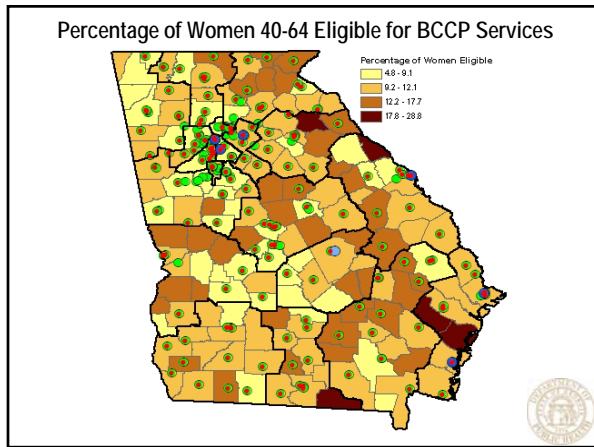
Georgia Breast Cancer Cases: Women 40-64, Diagnosed 2003-2007, Early Stage

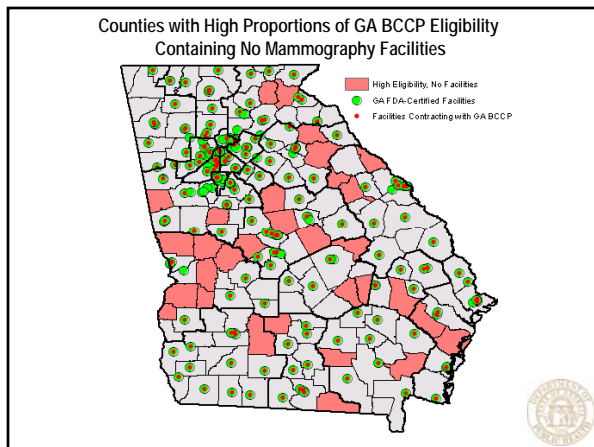


Georgia Breast Cancer Cases: Women 40-64, Diagnosed 2003-2007, Late Stage

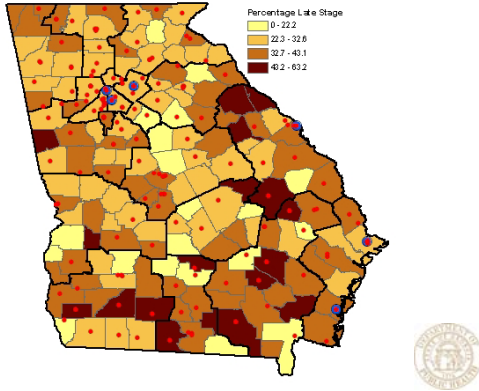




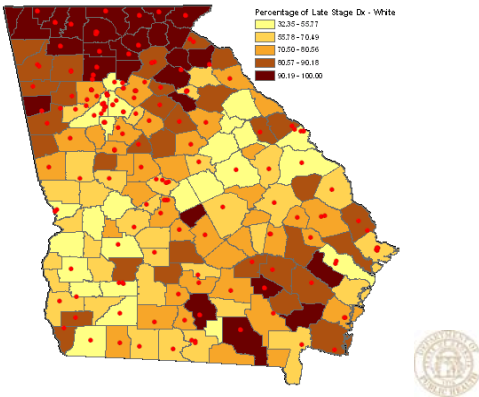




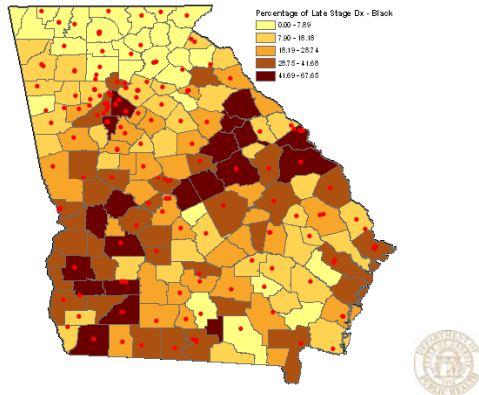
Percentage of Breast Cancer Cases Diagnosed Late Stage

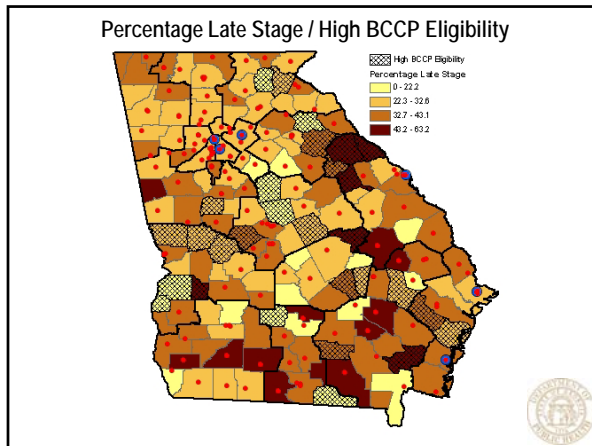


Percentage of Late Stage Diagnoses in White Women (40-64)



Percentage of Late Stage Diagnoses in Black Women (40-64)





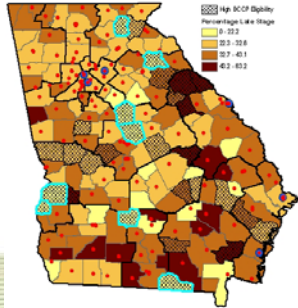
Focus Area 1

- High BCCP eligibility, no facilities, high percentage late stage
- Access/availability issues?
 - Transportation
 - BCCP jurisdiction/capacity if nearest facility is contracted with another district

Focus Area 2

- Low BCCP eligibility, has facilities, high percentage late stage
- Education/awareness issues?
 - Facilities available, but not being used
- Access?
 - Rural counties - transportation

Focus Area 3



- High BCCP eligibility, no facilities, low percentage late stage
- Population characteristics?
 - Crossing state lines for services?
 - Successful screening practices for early detection

Future Directions

- Continue working with partners such as Komen, American Cancer Society
 - Local outreach, raise awareness about the importance of screening
 - Transportation for clients to screening appointments?
 - Increased use of mobile mammography units?



Future Directions

- Work with health districts to identify pockets of need within their counties
- Determine which interventions might be most beneficial to specific populations
 - Urban vs. Rural – transportation
 - Ethnic minorities – cultural awareness/sensitivity
 - Non-English speakers – language barriers



Strengths and Limitations

- **Strength:** GA BCCP already works closely with GA Comprehensive Cancer Registry and American Cancer Society
 - Have regular access to all data to monitor trends closely
- **Limitation:** If mammography facilities do not exist in a geographic location, they cannot just be “created”
- **Limitation:** Financial realities



Thank you!
Questions?

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