Background: Breast cancer is the second most common cause of cancer death among US women. Regular mammography is the most effective method to reduce mortality. However, uninsured women face substantial barriers to receiving regular mammograms and paying for cancer treatment. The Show Me Healthy Women (SMHW) Program provides reimbursement to SMHW physicians for breast cancer screenings and treatment for their low-income patients. Enrollment in the SMHW program is voluntary. We describe the geographic distribution of SMHW providers related to breast cancer incidence and mortality rates by county.

Methods: This analysis used Geographic Information System (GIS) to combine county-level rates of in situ breast cancer incidence and mortality in Missouri with SMHW provider locations.

Findings: Of the 114 counties plus St. Louis City, 80% of the counties have at least one SMHW provider. Compared with the state breast cancer mortality rate, St. Louis City, Maries, St. Louis, and Cole Counties were statistically higher. However, St. Louis City, St. Louis and Cole counties (along with 4 other counties) had higher in situ rates, suggestive of more mammography screening behavior.

Discussion: The difference in mortality and in situ breast cancer rates, particularly in St. Louis City, St. Louis and Cole counties may be due to significantly lower screening behavior in the African-American community. Targeted outreach to this population is warranted. Although mortality rates were not statistically higher than state rates in the southeastern region of the state, in situ rates were lower than expected, which may indicate that early detection is suboptimal.