

Title: Clinical pathways of diagnostic follow-up after a positive screening mammogram

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Purpose: Current literature on diagnostic follow-up pathways of clinical imaging and biopsy subsequent to a positive screening mammogram is largely conceptual. Insurance status has been associated with access to screening mammography as well as delays in follow-up after a positive screening mammogram. The extent to which insurance status influences the type of care management received subsequent to a positive screening mammogram is unknown.

Methods: Using data from a North Carolina population-based registry of breast imaging from 1995-2010, we described the series of diagnostic follow-up pathways women experienced after a positive screening mammogram, as defined by the Breast Cancer Surveillance Consortium. We examined differences in these pathways by self-reported insurance status and assessed the association between self-reported insurance status and receipt of biopsy.

Results: The most common diagnostic resolution pathways following a positive screening mammogram were: 1) diagnostic mammography only (72%); 2) diagnostic mammography, ultrasound (11%); and 3) diagnostic mammography, biopsy (7%). About 6% of the population received no observable follow-up during the study. There were differences in pathway by self-reported insurance status ($p < 0.001$). Among women under 65 years of age, those reporting both Medicare and Medicaid were more likely to have received biopsy (OR 1.68, 95% CI 1.05-2.68) when compared to those reporting private insurance. Among women 65 years and older, those reporting private insurance were less likely to have received biopsy when compared to those reporting Medicare and private insurance (OR 0.53, 95% CI 0.35-0.79).

Conclusions: We observed differences in biopsy use after a positive screening mammogram by self-reported insurance status. Information on the types of follow-up care women may receive after a positive screening mammogram may be useful in breast cancer intervention programming.