

POSTER ABSTRACTS

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Screening Clinical Breast Examination Sensitivity, Specificity, and Predictors of Accuracy

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Background: Although many U.S. women receive regular screening clinical breast examination (CBE), the accuracy of CBE in the community setting remains uncertain.

Methods: We determined the accuracy of CBE among asymptomatic female health plan enrollees in five states (WA, OR, CA, MA, and MN). Among women who received a screening CBE within one year of breast cancer diagnosis and who subsequently died of breast cancer (N=485), sensitivity was estimated as the proportion of women whose most recent CBE was abnormal. Among women without a breast cancer diagnosis in the year following a screening CBE (N=1,427), specificity was estimated as the proportion whose screening CBE was normal. Bivariate and logistic regression analyses identified patient characteristics associated with CBE accuracy.

Results: Among women who subsequently died of breast cancer, the sensitivity of screening CBE was 21.6% (95% CI: 18.1%, 25.6%). Decreased sensitivity was associated with: estrogen use at the time of CBE (OR 0.23; CI 0.07-0.80) and concurrent receipt of a Pap smear (OR 0.45; CI: 0.27-0.72). There were non-significant trends toward decreased sensitivity among women with a family history of breast cancer and increasing chronic disease comorbidity. Specificity of screening CBE was 98.6% (95% CI: 97.8%, 99.0%). Both a family history of breast cancer (OR: 0.31, CI: 0.13, 0.78) and a history of breast biopsy (OR 0.22, CI: 0.09, 0.55) were independently associated with decreased specificity.

Conclusions: Screening CBE provided in the community is less sensitive but more specific than in clinical trials of breast cancer screening.