Strategies That Improve Mammography Screening Rates


Study Overview

Objective. To evaluate the effect of a clinic-based intervention program on mammography use by inner-city women.

Design. Randomized controlled trial.

Setting and participants. A general internal medicine clinic in the university-affiliated county hospital serving metropolitan Seattle. 314 women aged 50 to 74 years with at least 1 routine clinic appointment (during a period when they were due for mammography) between September 1995 and November 1996.

Intervention. The intervention program to increase mammography rates involved both physicians and nurses and incorporated physician education, provider prompts, printed and audiovisual patient education materials, preappointment telephone or postcard reminders, rescheduling assistance, and transportation assistance (bus passes).

Main outcome measures. Mammography within 8 weeks of clinic visit.

Main results. Mammography completion within 8 weeks of clinic visits was significantly higher among intervention (49%) than control (22%) women (P < 0.001). This effect persisted after adjustment for potential confounding by age, race, medical insurance coverage, and previous mammography experience at the hospital (odds ratio 3.5; 95% confidence interval, 1.9 to 6.5). The intervention impact was modified by type of insurance coverage and history of prior mammography. Process evaluation indicated that bus passes and rescheduling efforts did not contribute to the observed increases in screening participation.

Conclusion

A clinic-based program incorporating physician education, provider prompts, patient education materials, and appointment reminders and emphasizing nursing involvement can improve adherence to breast cancer screening guidelines among inner-city women.

Commentary

Mammography screening reduces mortality among women 50 years and older, and a number of organizations have issued guidelines calling for regular screening [1–3]. Unfortunately, screening rates among low-income, minority, and inner-city women consistently have been shown to be suboptimal [1,3]. The most frequently cited reasons for low rates in these groups are not knowing that screening is necessary and lack of physician recommendation [4]. As this study demonstrates, programs designed to increase mammography rates should include educational support and physician involvement. Further research should evaluate which other elements are effective and merit inclusion in future programs.

Applications for Clinical Practice

This study demonstrates several strategies that increase mammography screening rates in inner city women and shows the value of a multifaceted but integrated approach. Screening enhancement programs using these strategies and this approach can be implemented nationwide, provided that regional and subpopulation differences are taken into consideration.

References