Women's behaviors toward mammogram and Pap test: opportunities to increase cervical cancer screening participation rates

*Background:* Screening rates for breast and cervical cancer remain moderate among women over 50 years of age. Because cervical and breast screening interventions can be linked, evaluating screening factors relating to both is important. This study evaluates characteristics associated with breast and cervical cancer screening participation in women aged 52-69.

*Methods:* A cross-sectional study was used to describe individual and physician characteristics associated with breast and cervical cancer screening behaviours of 1,173,456 eligible women aged 52 to 69 in Ontario, Canada. Overdue for screening was defined as >2.5 years from last mammogram or >3.5 years from last Pap test. Factors that might influence uptake of mammogram or Pap test were included as covariates in a multivariable multinomial logistic regression model.

**Results:** Overall, 52.4% of eligible women were up-to-date for both, 21.3% were overdue for both, 14.4% were overdue for Pap test but were up-to-date with mammogram, and 12.0% were overdue for mammogram but were up-to-date with Pap test. There was an opposite effect of age on likelihood of being overdue for Pap test only versus mammogram only. Women aged 67-69 compared to 52-54 were more likely to be overdue for Pap test only (AOR=2.3; 95% CI 2.3-2.4) and less likely to be overdue for mammogram only (AOR=0.5; 95% CI 0.5-0.6). Women rostered to a male physician versus a female physician were more likely to be overdue for Pap test only (AOR=2.3; 95% CI 2.3-2.4) or to be overdue for both tests (AOR=5.2; 95% CI 5.0-5.2).

Conclusions: Comparing screening patterns may provide physician and patient directed strategies to increase cervical cancer screening participation by recruiting women who are overdue for Pap test but undergoing breast cancer screening.