Residents’ Knowledge, Attitudes and Behaviors in Breast, Colon, and Lung Cancer Prevention: Findings from a Residency Training Project


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Introduction: Cancer screening rates among disadvantaged minorities remain lower than recommended levels. We sought to implement and evaluate improvements in breast, colon, and lung cancer prevention for a medically underserved Hispanic population cared for in our Family and Community Medicine Residency Program. This study evaluates the educational outcomes among participating residents.

Aims and Methods: Subjects were 35 family medicine residents, divided into three teams. Intervention: Each resident team addressed one cancer, either breast, colon or lung. The training intervention involved residents receiving training in the Chronic Care Model, searching the literature for effective preventive interventions, and designing quality improvement projects for their team’s cancer prevention area. Measurement: Surveys assessed knowledge, attitudes and behaviors (KAB) related to the prevention of breast, colon and lung cancers. Procedure: Residents completed surveys prior to training and again 6 months later, after interventions were designed. We used paired t-tests to assess changes from pre- to post-test scores. Repeated measures ANOVAs assessed team differences in KAB scores.

Results and Conclusions: In general, knowledge, attitude, and behavior scores showed minimal absolute changes over 6 months. Of the 9 trends evaluated (K/A/B for each of 3 cancers), only 3 were statistically significant. Attitude scores for lung cancer (p=.03) and behavior scores for colon cancer (p<.001) improved over time, but breast cancer attitude scores worsened (p<.01). The 3 changes were modest in absolute terms. Knowledge scores for all three cancers remained about the same. We found no between-team differences in attitudes, knowledge or behavior. We conclude that the training model had minimal impact on residents’ knowledge, attitudes, or behaviors. An evaluation of patient outcomes is in progress.