What factors affect willingness to undergo lung cancer screening?

Philadelphia, PA — Lung cancer may be the leading cause of cancer death in both men and women, but new evidence-based guidelines for lung cancer screening via low dose CT scan are providing hope for reducing lung cancer mortality. However, these screenings may come with a cost, including false positive rates, invasive follow-up and other potential harms. How can physicians and patients determine if screening is the right choice?

That question is the focus of studies by University of Kentucky researcher Jamie Studts and collaborators Margaret Byrne at the University of Miami and Paul Han at Maine Medical Center. Their work emphasizes the importance of Shared Decision Making (SDM) — the ways that physicians should communicate all the facts to enable their patients to make completely informed decisions on screening. Because of the potential negative factors associated with lung cancer screening, a blanket approach to screening — like what is frequently done for other cancers including breast or colon — is not considered ideal.

"While some cancer screening programs are generally population-based, lung cancer screening involves a more targeted group of individuals who are at high risk of developing lung cancer," Studts said. "The National Lung Screening Trial showed that participating in annual low dose CT scans of the chest reduced lung cancer mortality among individuals between the ages of 55 and 74 with a 30-pack year history of cigarette use and were either current cigarette smokers or had quit within the past 15 years."

Patients recruited for this research were drawn from a national sample of individuals considered to be high risk for lung cancer — prime candidates for lung cancer screening. The team used vignettes and scenarios to assess what factors influence the patient's decision to undergo screenings or not.

Results were not generally in favor of screenings. Studts reports that the overall mean score pointed to a "moderately unfavorable attitude" toward lung cancer screening. The two most influential factors on the decision were the provider recommendation and out-of-pocket cost, while access to screening showed moderate influence.

Surprisingly, mortality reduction and rates of false positive scans were among the least influential factors in a patient's decision to get screened.

"Provider recommendations for cancer screening are consistently the most influential factor in screening decisions, yet we were somewhat surprised to learn that the specific benefits and
harms of lung cancer screening seemed to have relatively less influence on decision making," Studts said. "These data support the need to work with primary care providers to help them communicate with candidates for lung cancer screening."

Study results will be presented at 2:25 p.m. on Thursday, April 24th during the 2014 Society of Behavior Medicine's Annual Meeting & Scientific Session in Philadelphia, Penn.

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