

Healthcare Providers’ Perspectives on Lung Cancer Screening

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Background

According to the CDC, more individuals in the United States die from lung cancer than any other type of cancer. In 2013, the United States Preventative Services Task Force (USPSTF) added lung cancer screening guidelines, a necessary update. As primary care providers (PCP) have been crucial in educating their patients on the harms of smoking, they will also be vital in implementing this new screening requirement for lung cancer. The USPSTF guideline recommends a yearly low dose CT scan in adults, ages 55-80, with a 30-pack-year history of smoking, who currently smoke or have quit in the last 15 years. The implementation of this new screening will increase the chances of early detection of lung cancer (3). For this screening to be beneficial to patients, PCPs must follow USPSTF guidelines and screen their patients who meet the requirements. Research completed by the American Cancer Society showed that in 2015 lung cancer screening rates had only increased by 0.6% (2).

Objective

The intent of this project is to discover barriers rural community PCPs face when implementing lung cancer screening into their everyday practice. Furthermore, we wish to analyze the local providers opinions on the USPSTF lung cancer screening protocol to determine if their opinion on lung cancer screening affect their practice.

Methods

An 11-question survey was created to assess the barriers and attitudes of primary care physicians on lung cancer screening. The survey was sent out to primary care providers including family medicine residents, internal medicine residents, family medicine attendings, outpatient internal medicine physicians, family medicine physician assistants, and family medicine nurse practitioners, from the local hospital system at the beginning of this research project. The surveys were delivered via electronic mail via SurveyMonkey and in person via paper copies. Our inclusion criteria for lung cancer screening were in accordance with the USPSTF guidelines, which included adults aged 55 to 80 years old with a 30 pack-year smoking history and currently smoke or has quit within 15 years. Exclusion criteria were anyone who did not fall within the USPSTF guidelines, had a recent CT scan of the chest within 1 year, has a health problem that substantially limits life expectancy, and/or has inability or unwillingness to have curative surgery. The initial survey was sent out and the responses were analyzed.

Limitations

Our study was limited by the small amount of survey responses we received. There was also an unequal amount of surveys in each category of Family Resident, Family Physician, Internal Medicine Resident and Internal Medicine Physician. Our study was also limited from only using the residents and physicians who work within ArnotHealth. Lastly, our study lacked data from midlevel providers who participate in primary care and are encouraged to comply with the USPSTF guidelines.

Results

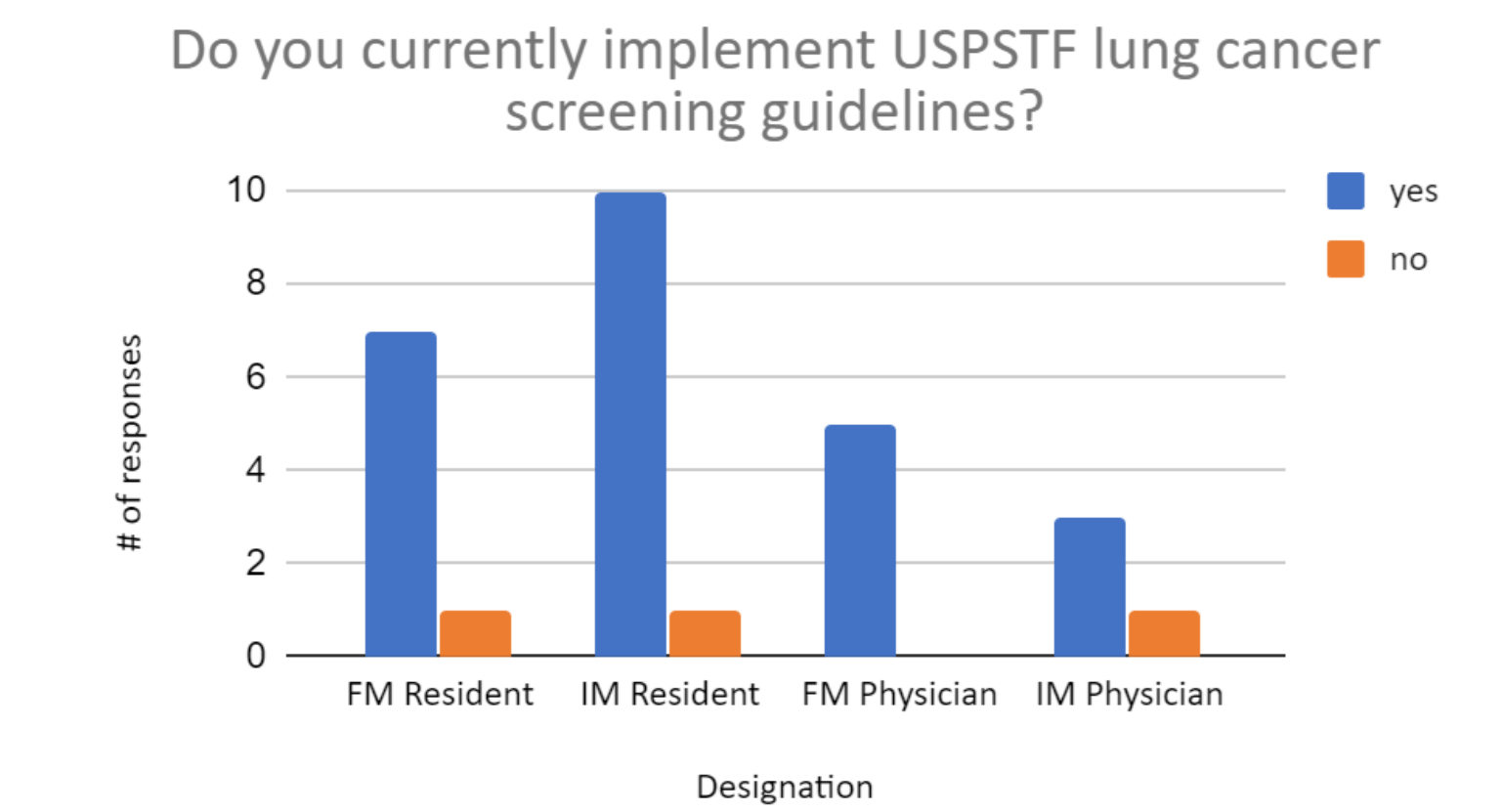


Figure 1: Do you currently implement USPSTF lung cancer screening guidelines?

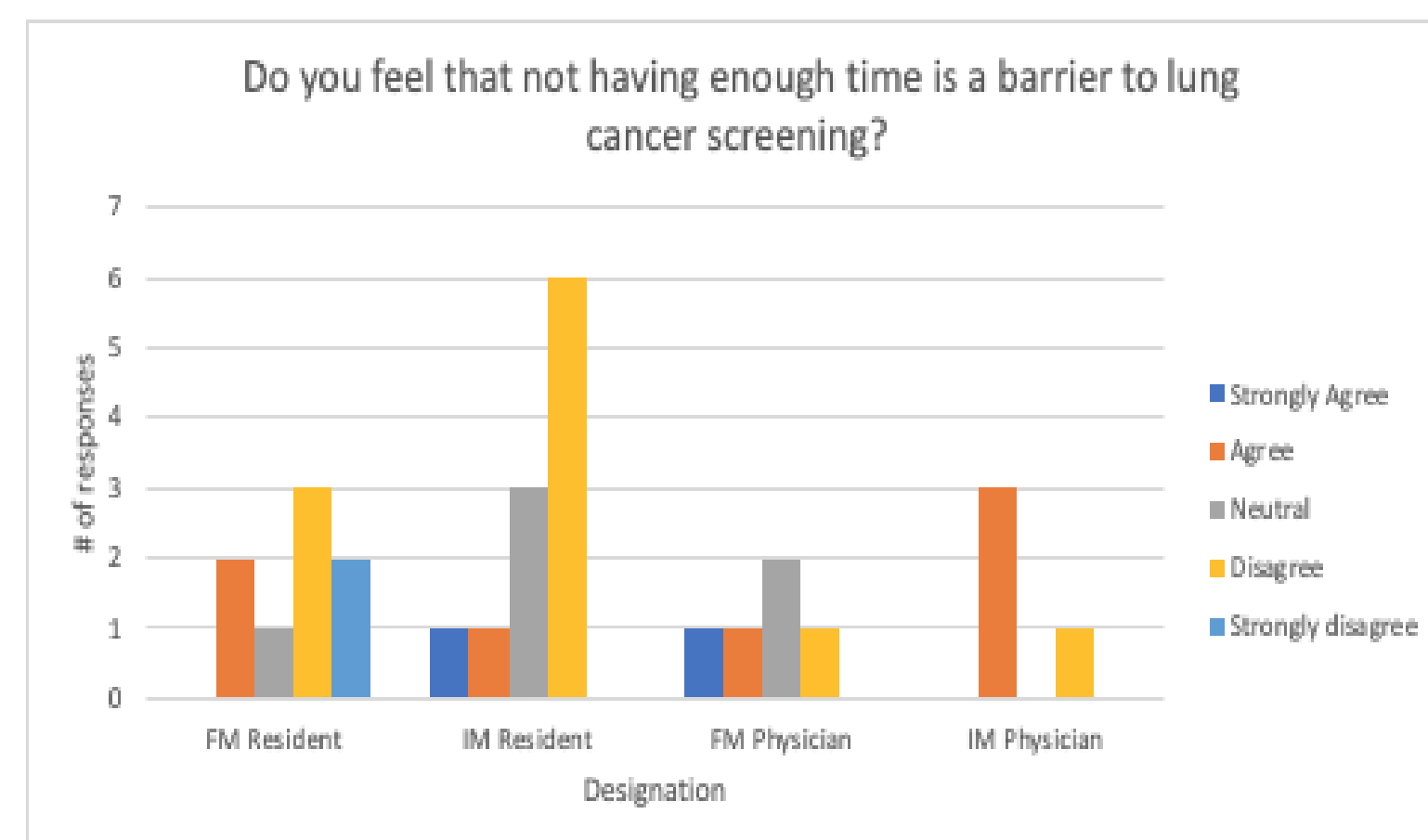


Figure 3: Do you feel that not having enough time is a barrier to lung cancer screening?

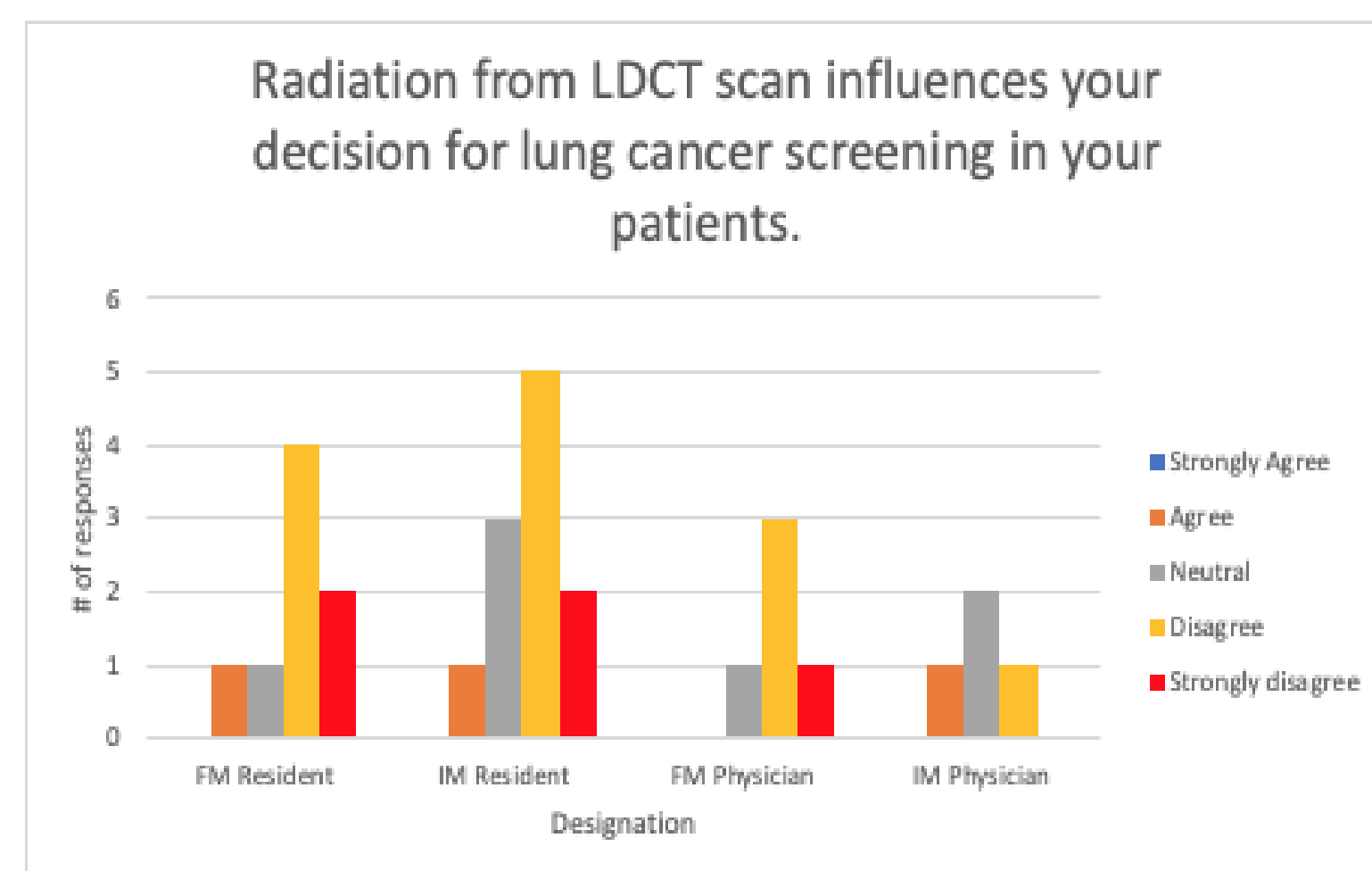


Figure 5: Radiation from LDCT scan influences your decision for lung cancer screening in your patients.

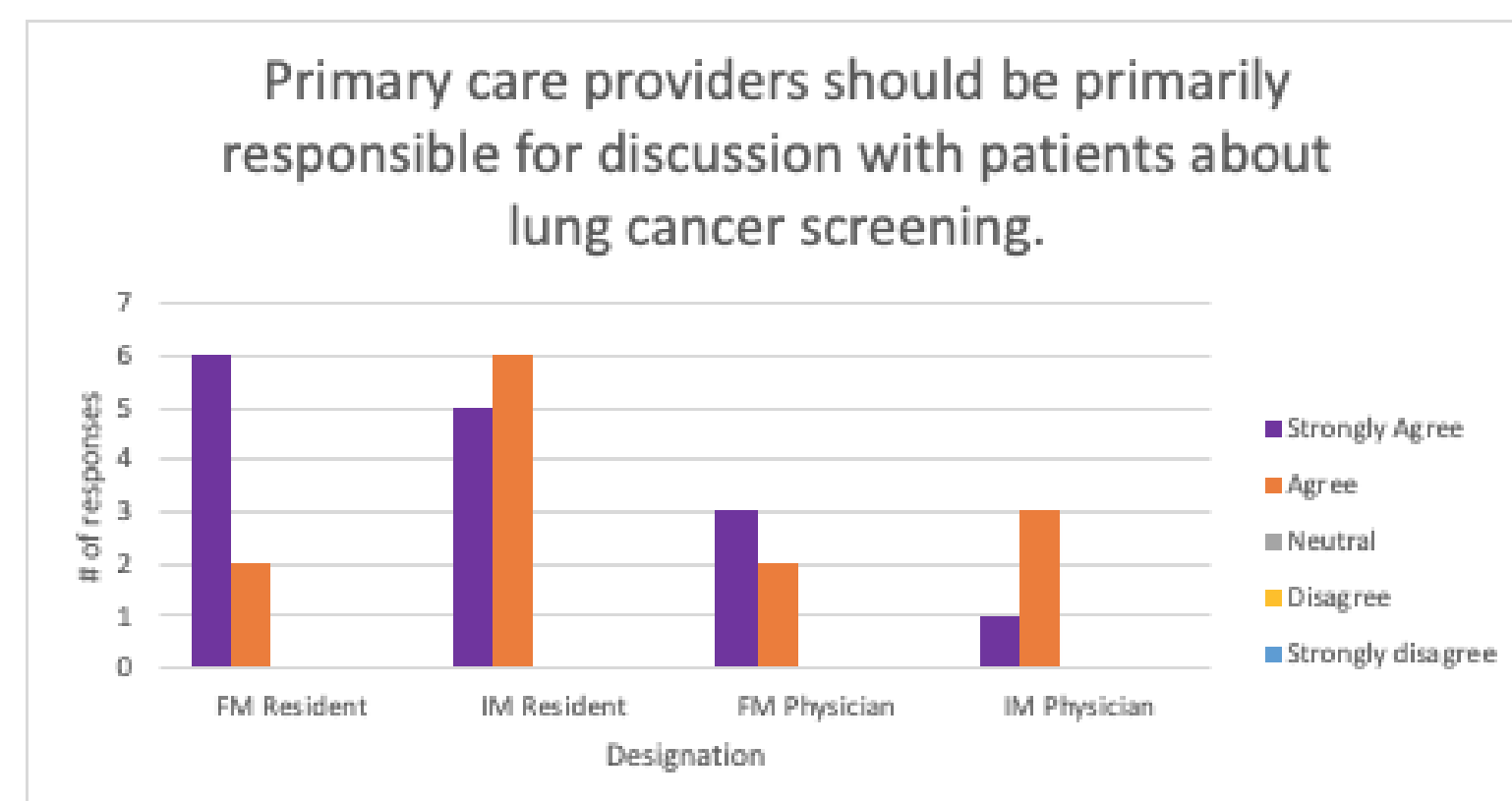


Figure 7: Primary care providers should be primarily responsible for discussion with patients about lung cancer screening.

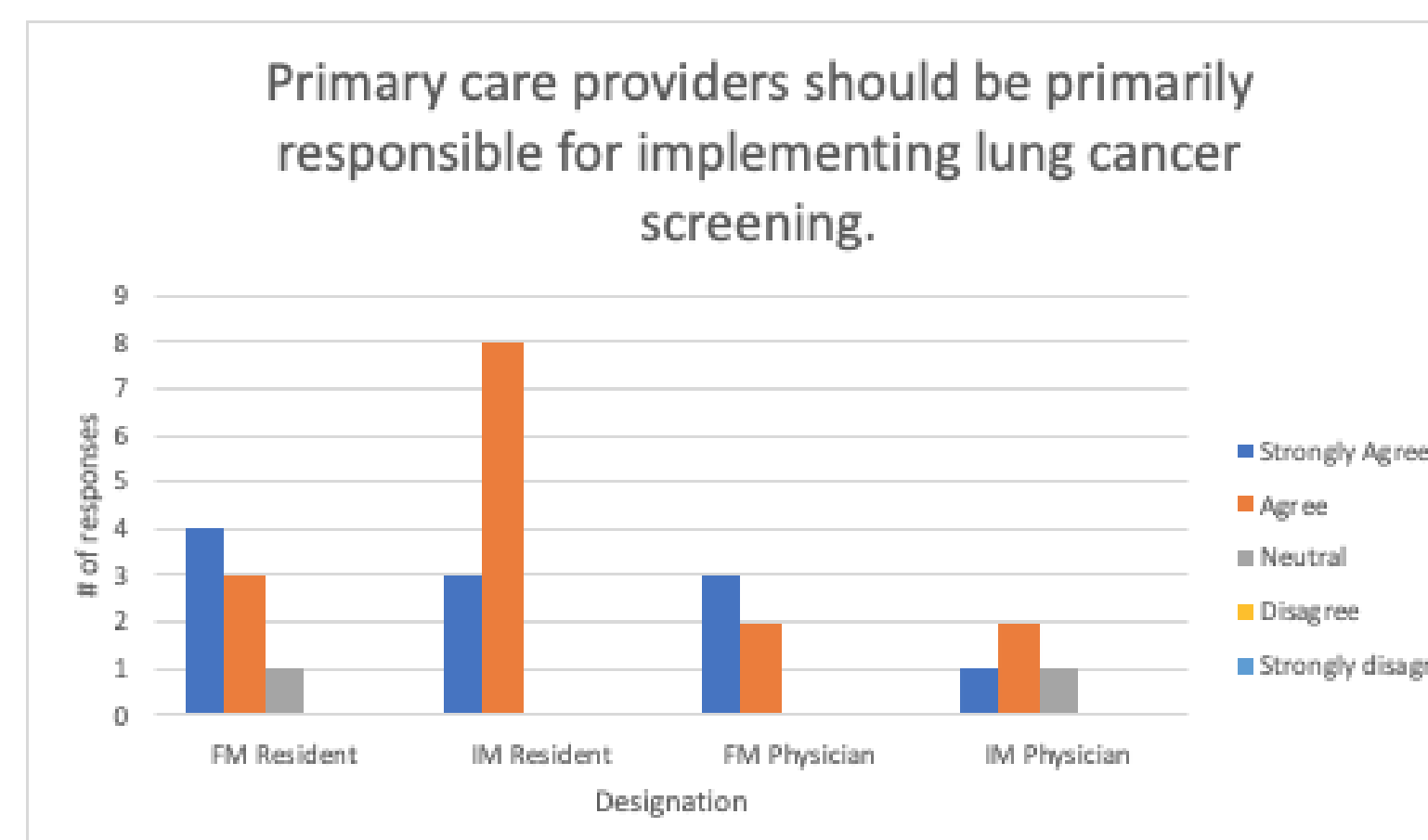


Figure 9: Primary care providers should be primarily responsible for implementing lung cancer screening.

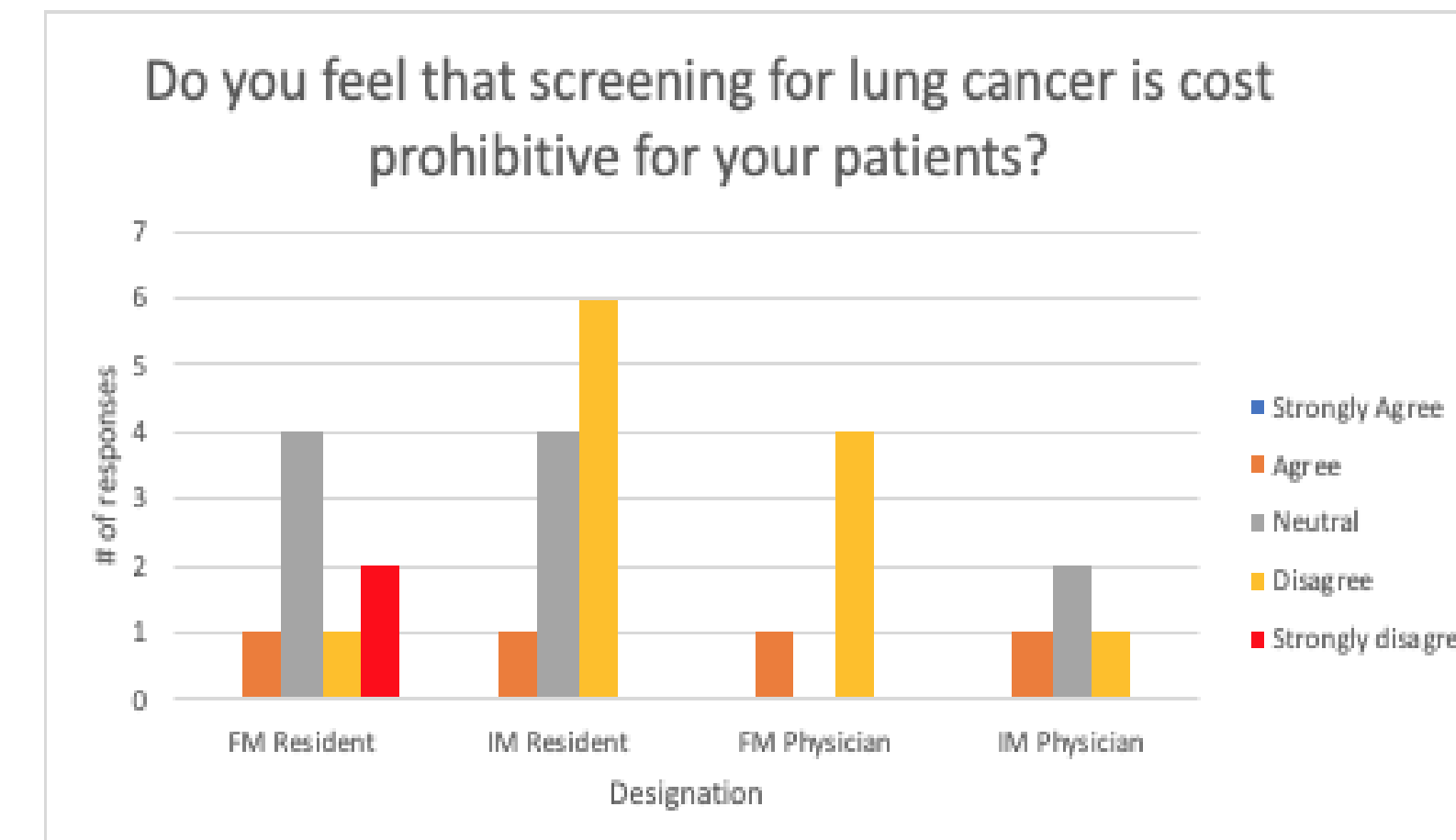


Figure 2: Do you feel that screening for lung cancer is cost prohibitive for your patients?

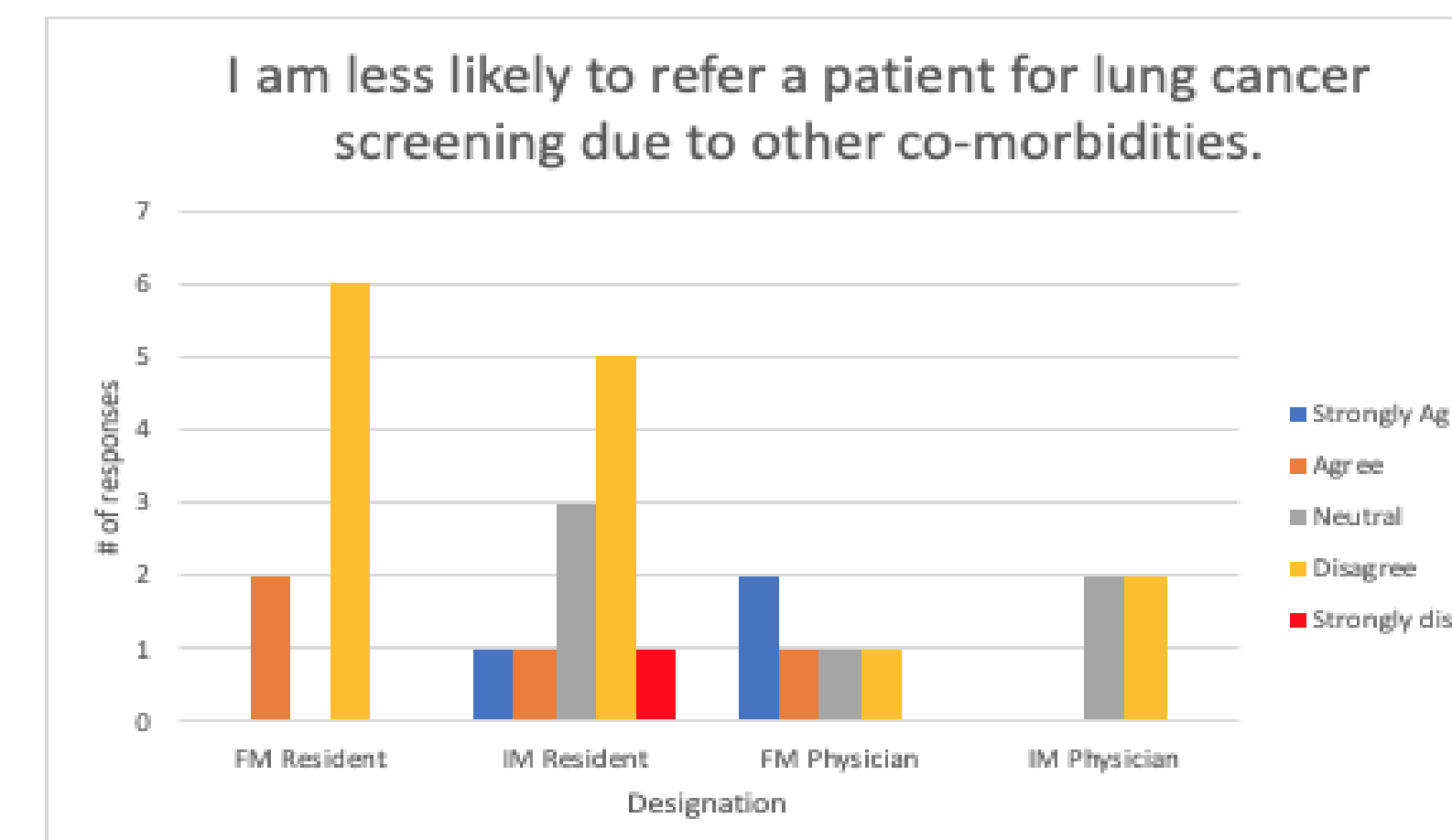


Figure 4: I am less likely to refer a patient for lung cancer screening due to other comorbidities.

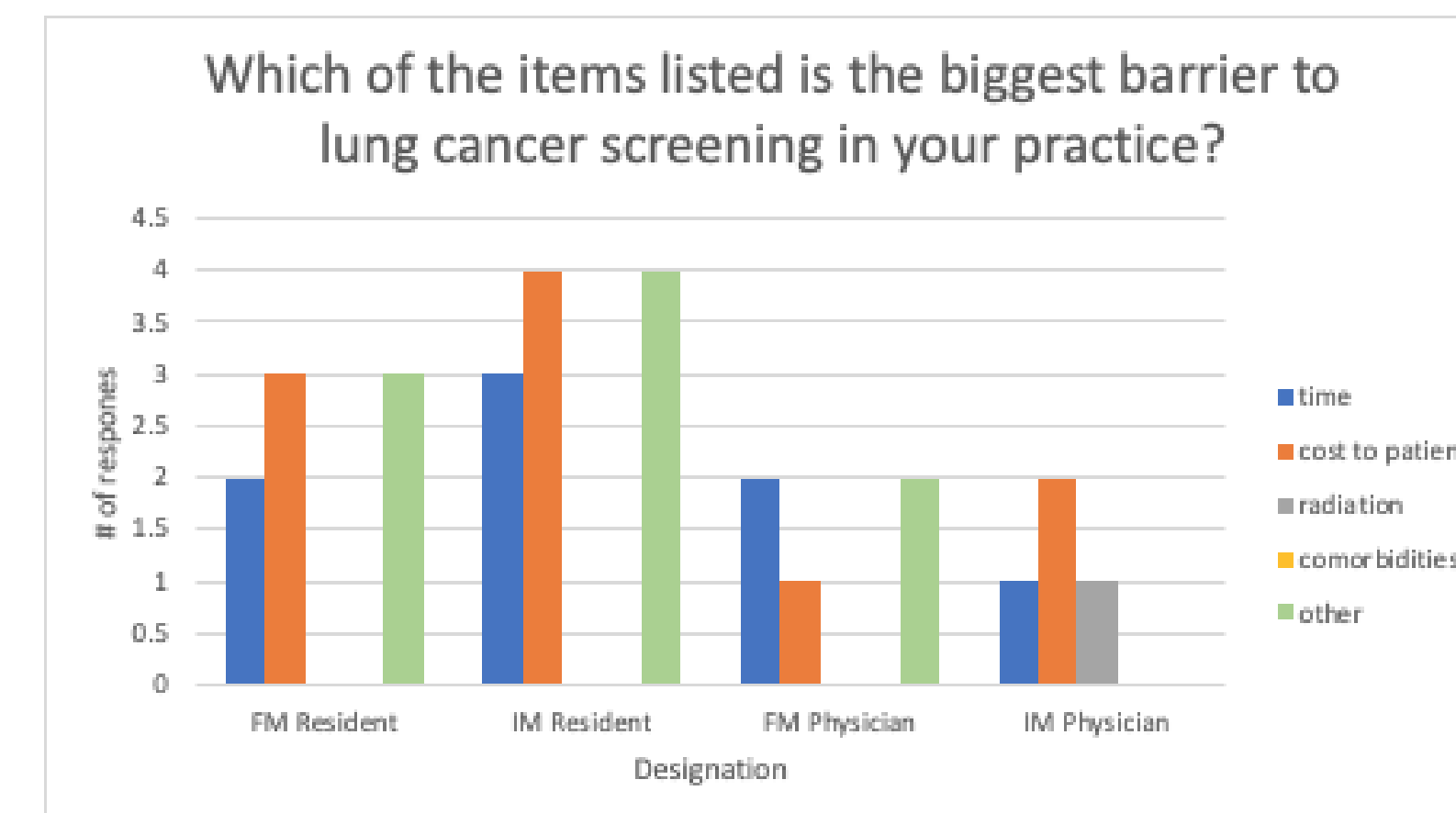


Figure 6: Which of the items listed is the biggest barrier to lung cancer screening in your practice?

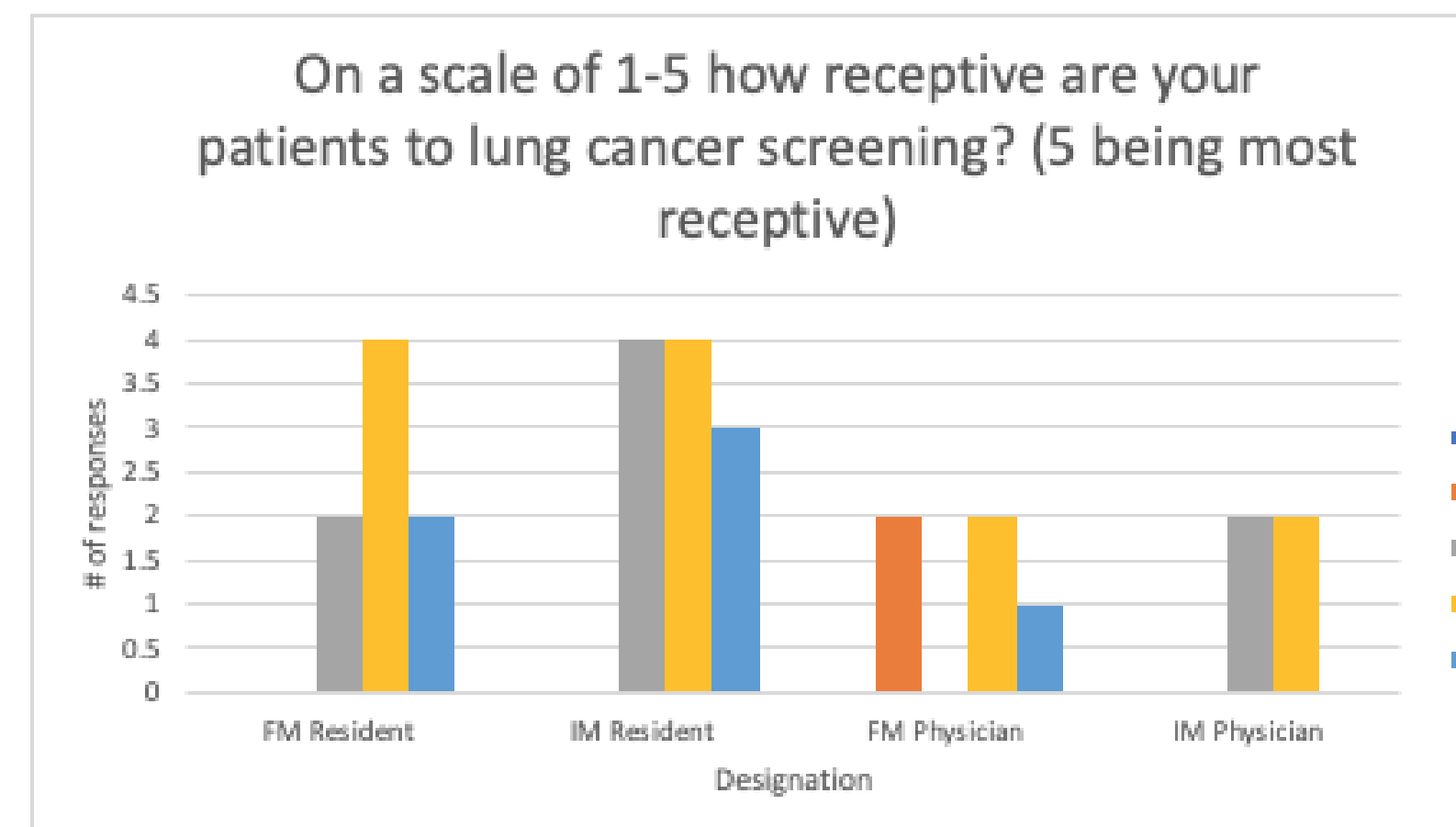


Figure 8: On a scale of 1-5 how receptive are your patients to lung cancer screening? (5 being most receptive)

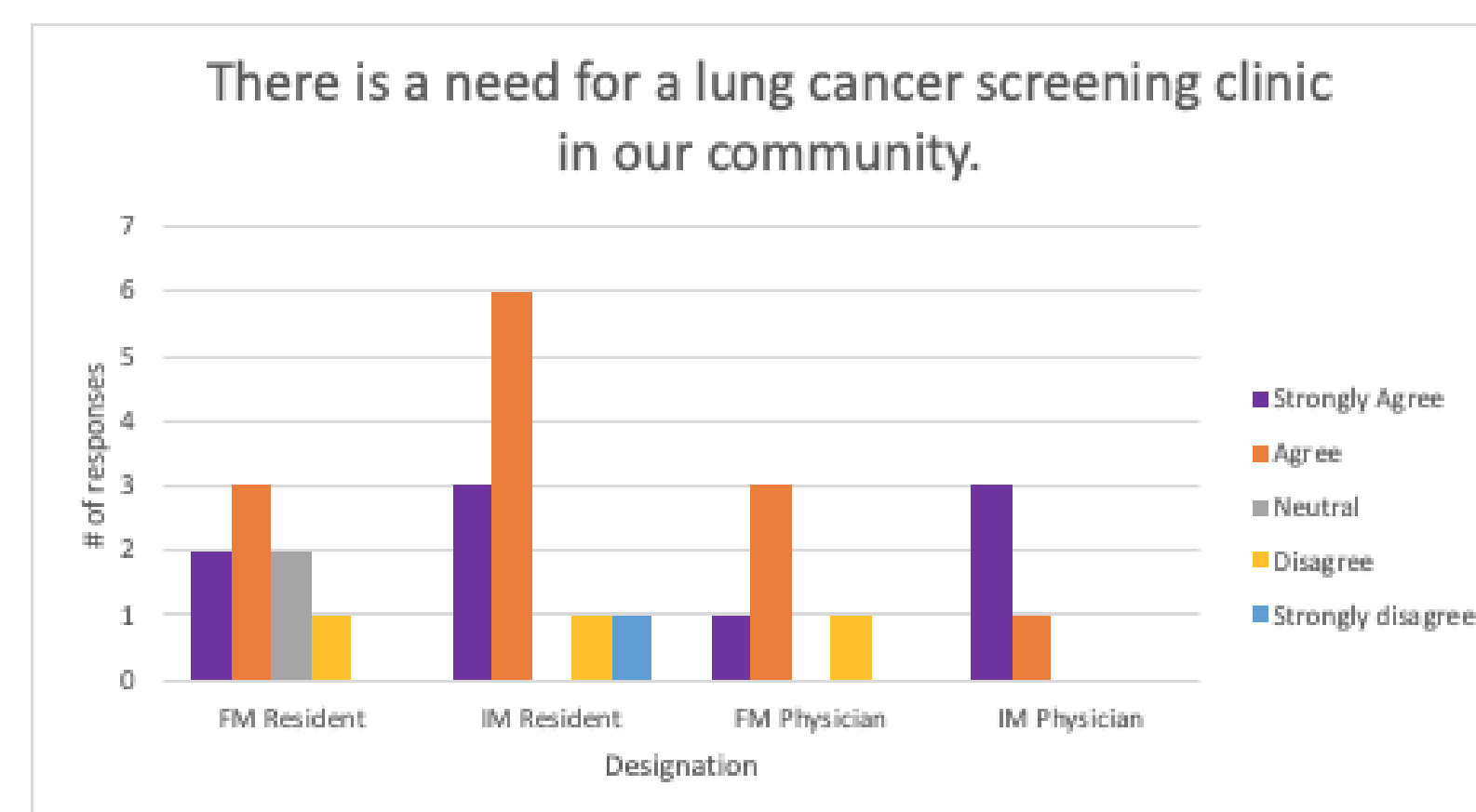


Figure 10: There is a need for a lung cancer screening clinic in our community.

Conclusion & Discussion

In general, our study showed that those who responded to the survey were either neutral or disagree that screening for lung cancer was cost prohibitive. The IM residents do feel that lung cancer screening is not time prohibitive, but IM physicians did. When asked if they are less likely to refer a patient for lung cancer screening due to other comorbidities, family medicine physicians agreed with this statement, while the others who took the survey seemed to disagree. It was shown that most physicians and residents who were surveyed incorporate the USPSTF guidelines into their practice. All individuals taking the survey, except for IM Physicians, disagreed that the radiation from the low dose CT scan affected their decision on lung cancer screening. Barriers to lung cancer screening include time, cost, insurance, patient preference and patient compliance.. Those who took the survey believed that primary care providers should be responsible to discuss lung cancer screening with their patients. It seems that most patients are perceptive to lung cancer screening and that primary care providers should be responsible for implementing lung cancer screening. Lastly, most individuals who took the survey agreed that there is a need for lung cancer screening in the community.

We began a lung cancer clinic operating through a family medicine office. Through this clinic we hope to increase awareness about lung cancer screening, promote smoking cessation, and to identify patients with cancer at an earlier, more treatable stage. We also hope to gather more surveys to continue to assess the barriers to patient screening. Patients were recruited by advertisement to local communities and in-hospital referrals to the clinic. Patients were screened by medical student researchers in conjunction with a board-certified family medicine physician. If the patient met the criteria for lung cancer screening, a low-dose CT scan of the chest was ordered and the patient was scheduled to follow up to review the results in the clinic in one month. If any abnormality or nodule was found on the CT chest per radiology report on follow up, the patient would be referred to a cardiothoracic surgeon who would determine if the patient would benefit from surgery. If the patient had no abnormalities on CT chest per radiology report, patient would be scheduled for a low dose CT chest in one year.

Hopefully with this guideline change providers will begin to implement lung cancer screening more into their practice and we will see a decrease in the mortality of lung cancer, which is currently the leading cause of cancer related deaths.

References

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