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Lung Cancer Screening in Primary Care

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ellen.macdonald@otterbein.edu

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Lung Cancer Screening in Primary Care

Ellen MacDonald, BSN, RN

Otterbein University, Westerville, Ohio

Importance of Lung Cancer Screening

- Cancer is the second leading cause of death in the United States in 2021 (Centers for Disease Control and Prevention, 2023)
- Lung cancer is the leading cause of cancer death in the United States (American Cancer Society, 2022)
- Early detection best allows for surgical tumor resection which is associated with best patient outcomes (deKoning, et al., 2020)

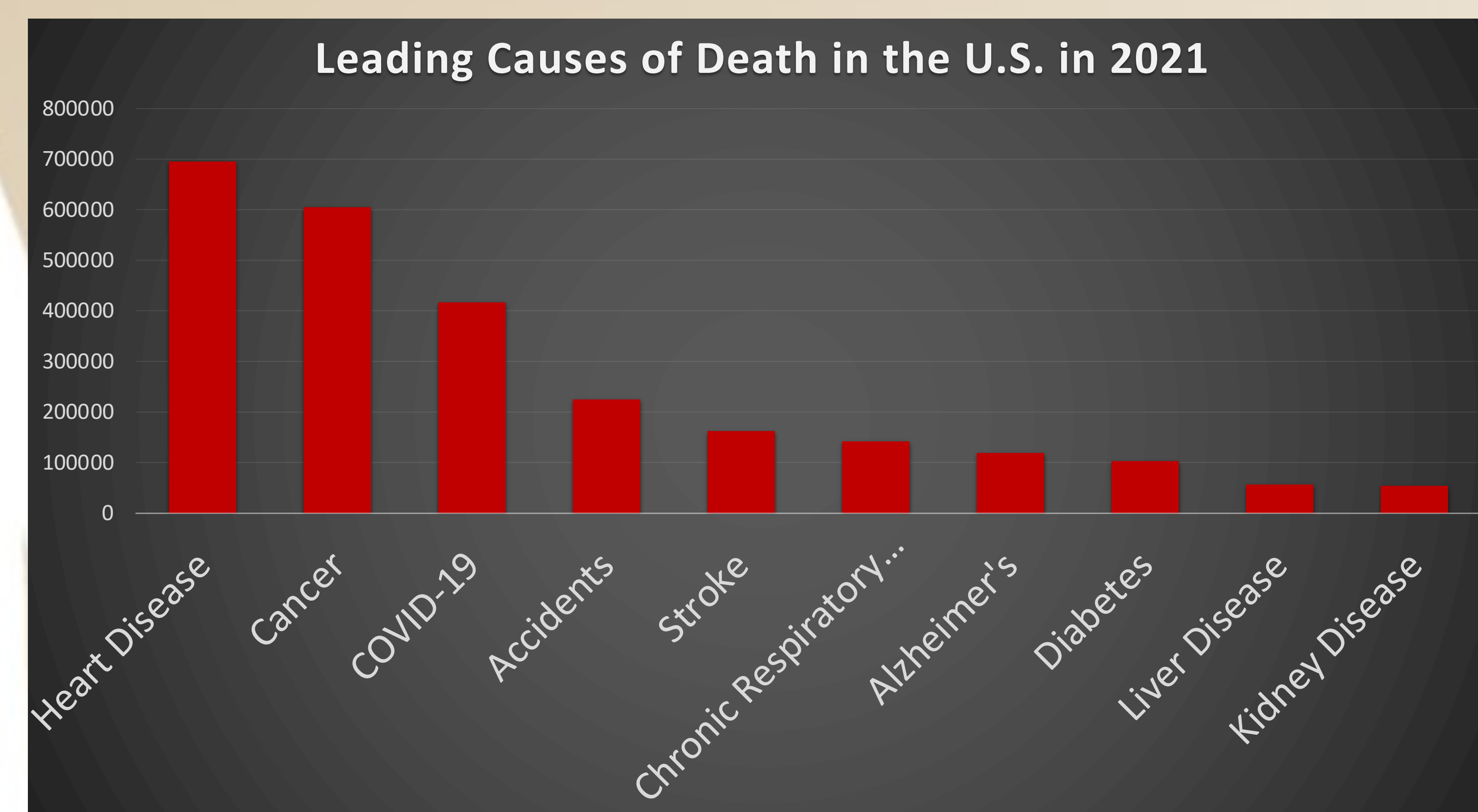


Figure 1. Leading causes of mortality according to the Centers for Disease Control and Prevention

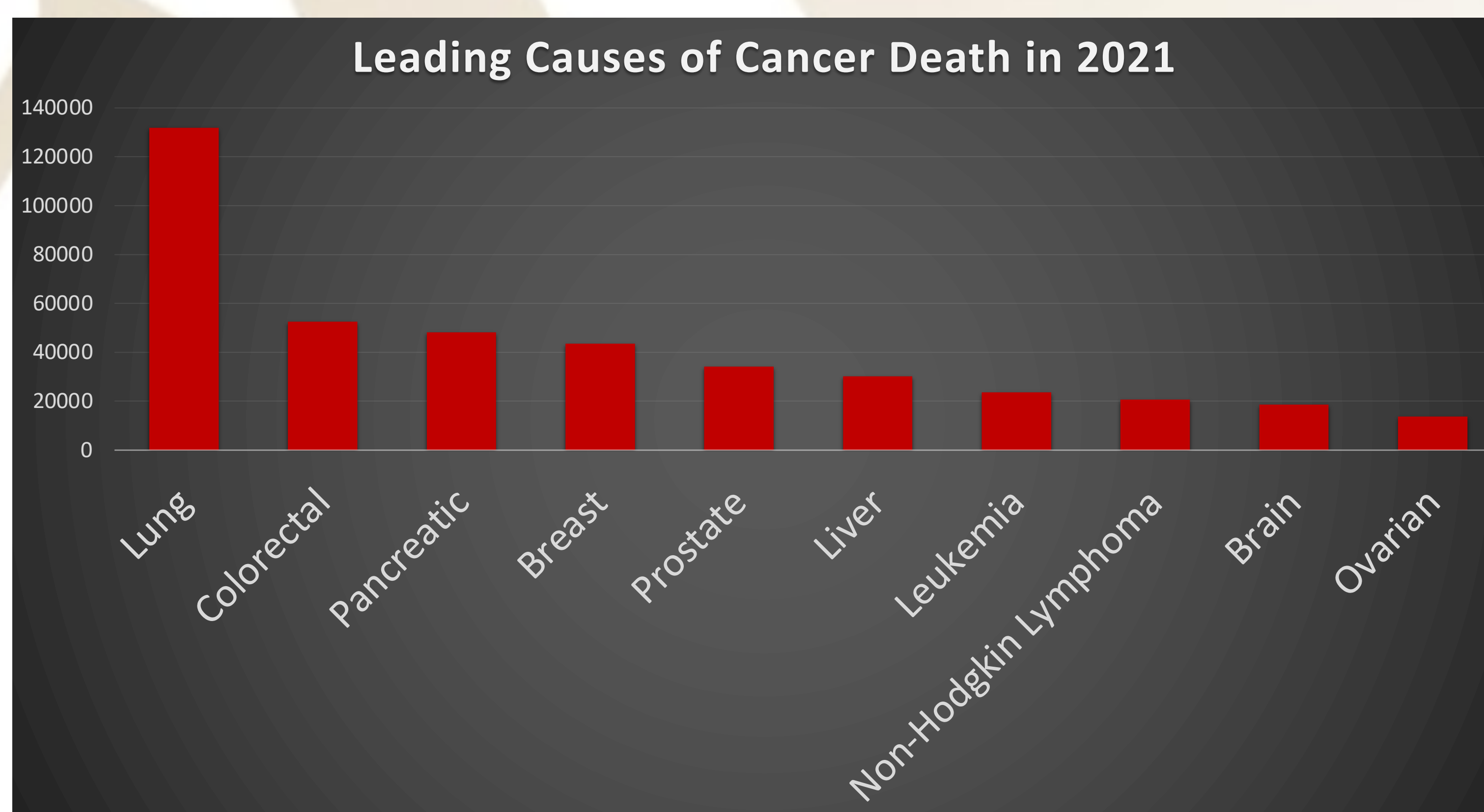


Figure 2. Leading causes of cancer death according to the American Cancer Society

Current Lung Cancer Screening Guidelines

- According to the US Preventative Services Taskforce, patients should be screened for lung cancer yearly with LDCT scan of the chest if they meet the following criteria:
 - Ages 50-80
 - Have a 20-pack year smoking history
 - Currently smoke cigarettes
 - Quite smoking cigarettes within the past 15 years
 - Do not have a current or former lung cancer diagnosis
 - Does not have a limited life expectancy or inability to undergo lung surgery (USPSTF, 2021)

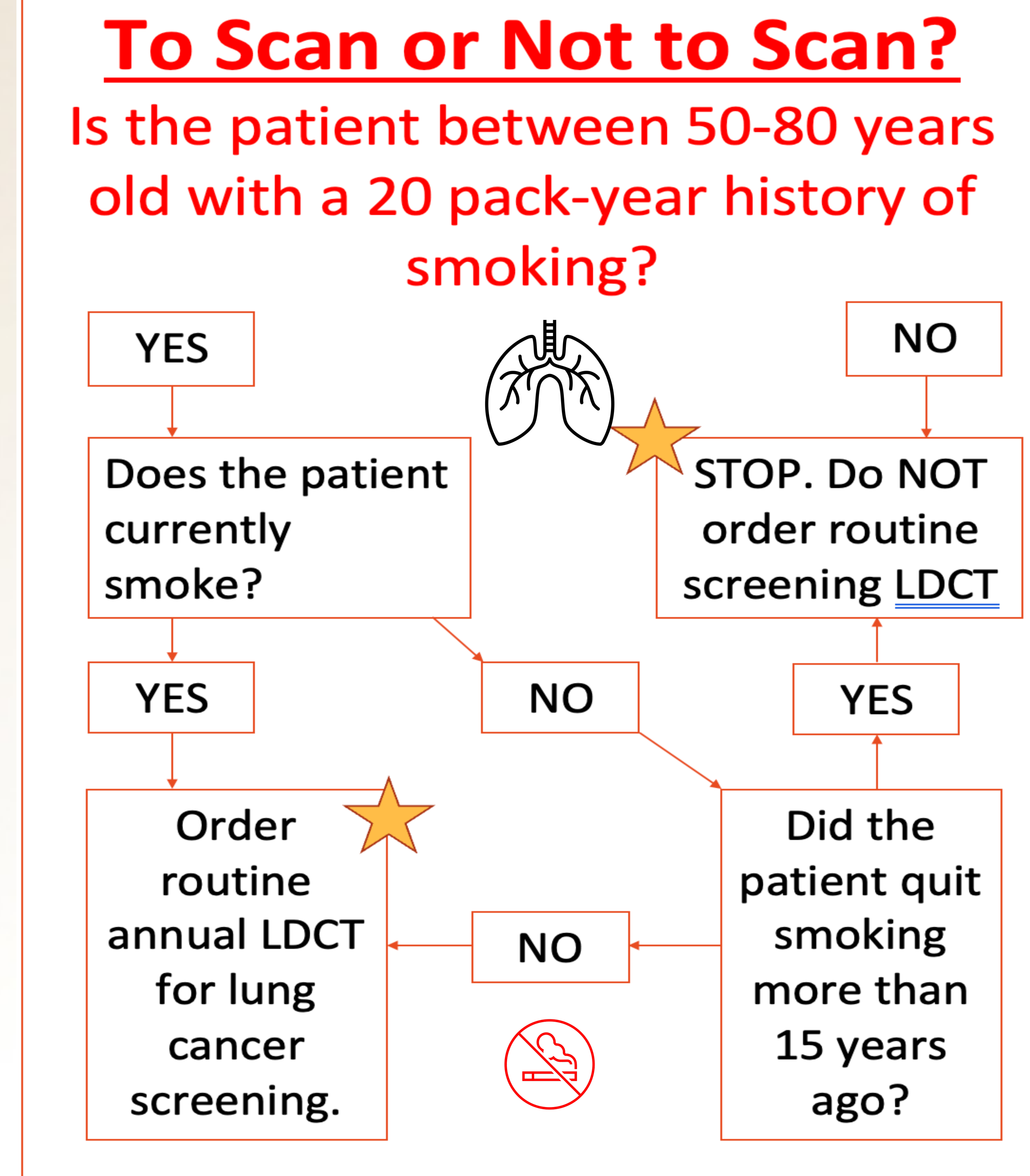


Figure 3. Sample visual aid to place in patient exam rooms in an adult primary care office

Research Design and Methods

- Primary care office located in central Ohio
- 10 charts were selected for audits of patients scheduled for annual well-visit
- Outcomes to be measured
 - Was LDCT scan ordered in compliance with guidelines
 - Was LDCT scan completed
 - Were any abnormal findings identified via LDCT

Summary of Findings

- Of the patient charts that were audited 20% were screened with a LDCT but did not meet the USPSTF guidelines due to having quit smoking more than 15 years prior
 - 100% of these patients had negative LDCT scan results
- 10% of patient charts that were audited were not screened with a LDCT scan despite being a current cigarette smoker with more than 20-pack year history
- 10% of patient charts that were audited had a LDCT scan ordered according to guidelines and had a pulmonary nodule detected and subsequent pulmonology referral for further evaluation and treatment

Practice Recommendations

- The providers may benefit from a visual aid in their exam rooms detailing the decision-making tree that goes into ordering a low-dose CT scan for routine lung cancer screening based on current guidelines
- Having this easy-to-read visual aid, as seen in Figure 3, in the exam rooms may also prompt some patients to inquire about the screening themselves therefore improving both patient and provider compliance with testing

View References
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