



Personalized Lung Cancer Screening – Acceptability among Primary Care Providers

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Introduction

Lung cancer screening (LCS) using Low-Dose Computed Tomography (LDCT) has been proven to reduce mortality.

Novel personalized screening approaches for LCS, like use of a risk calculator, are being developed that:

- increase screening effectiveness
- reduce harms
- increase screening efficiency

Implementation of personalized lung cancer screening is challenging.

Observation of current practices and assessing the needs of primary care providers is paramount to the implementation of personalized screening.

Methods

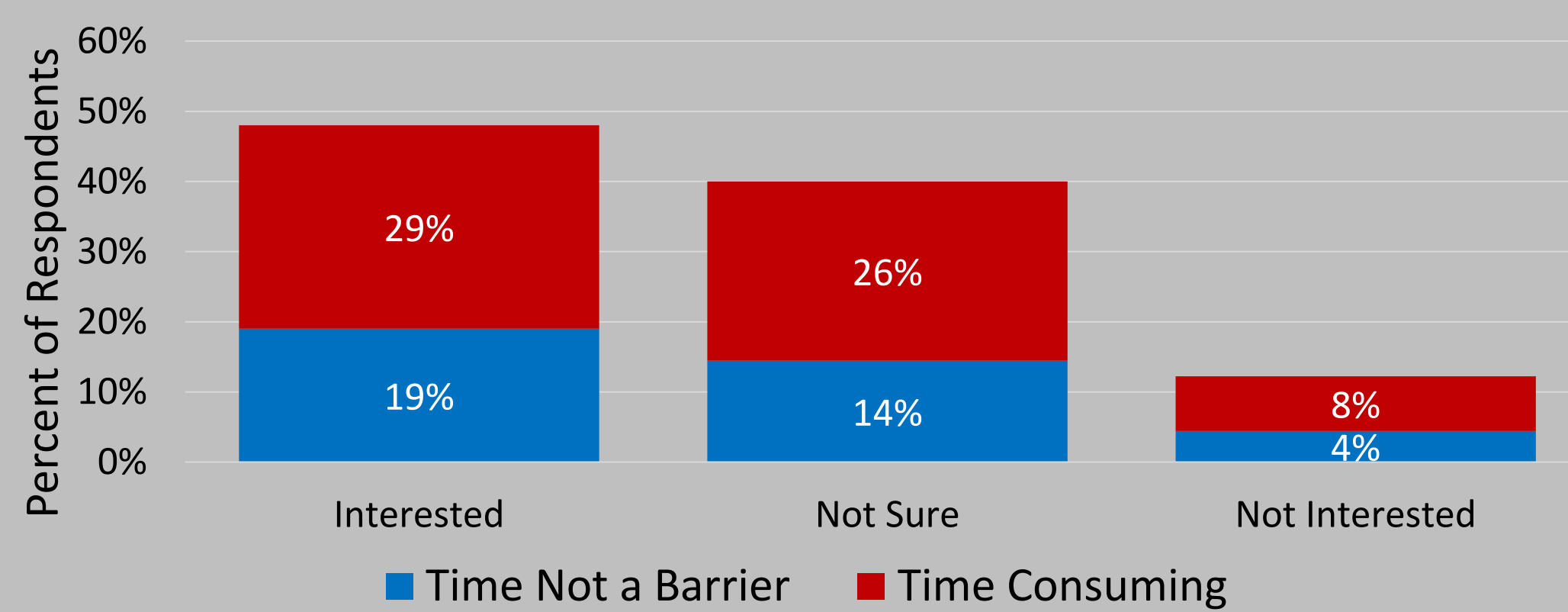
A survey of Texas-based primary care physicians, physician assistants, and nurse practitioners was collected to analyze

- various elements of current use
- acceptability of personalized (risk-based) LCS

91 responses were categorized based on demographic information and analyzed for response trends using a ten-times bootstrapped logistic regression.

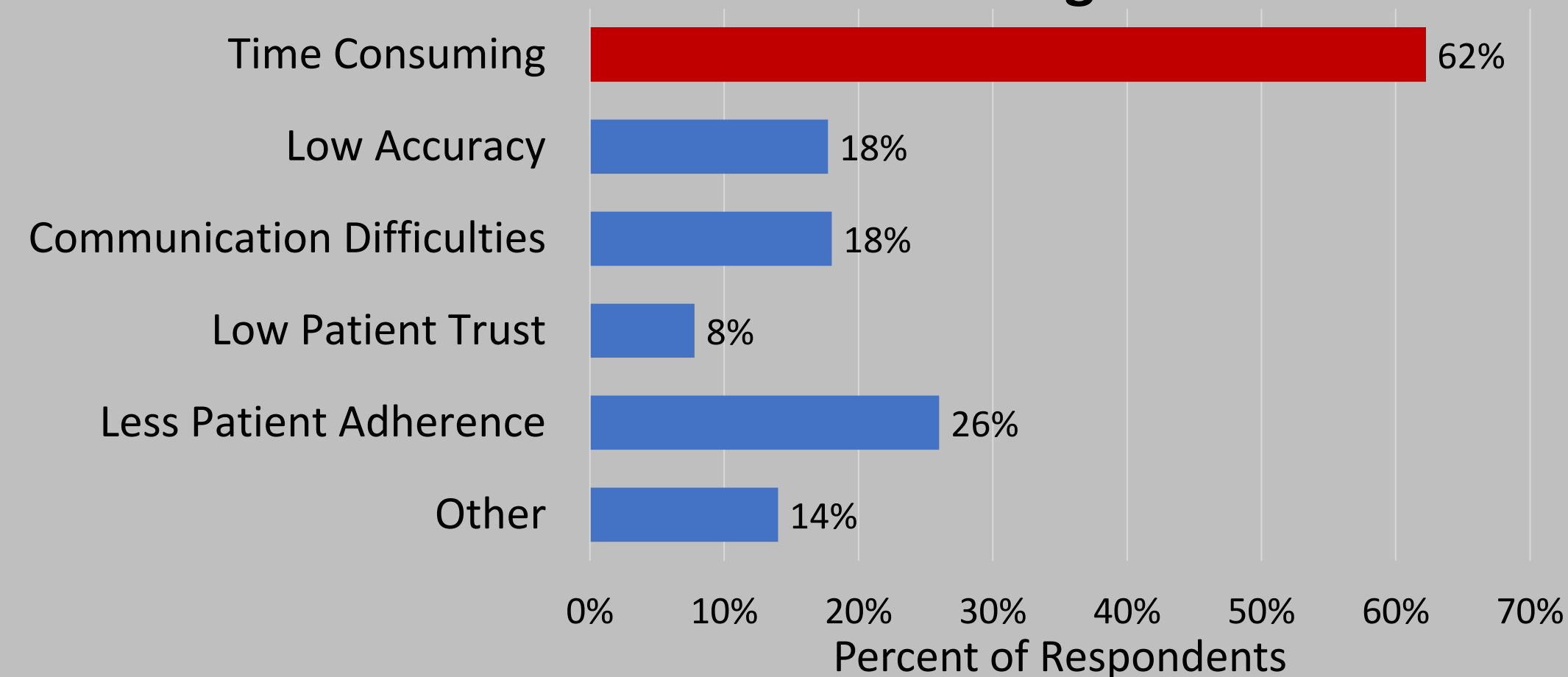
Results

Interest in Personalized Lung Cancer Screening Those Who Believe there is Time Barrier



Interest in personalized lung cancer screening among all healthcare providers. Personalized lung cancer screening is generally well accepted. There is not much opposition to the new approach. There were many “not sure” responses, indicating that healthcare providers would like additional information before coming to a decision about interest for implementation. The majority of “not sure” responses cited time as a barrier to personalized LCS.

Primary Concerns among Care Providers for Personalized Screening



Primary Concerns and Perceived Barriers to Personalized LCS

62% of those who responded “not sure” for their interest in personalized LCS cited time consuming as a concern. Additionally, we see other concerns, including, most notably, beliefs of less patient adherence with the personalized approach.

Nearly half of health care providers are interested in Personalized Lung Cancer Screening. If designed to be time-efficient, interest may reach 70-90%

Noteworthy Observations

- 1. Interest**
 - Young providers were more open to personalized LCS. This indicates that acceptance of the new system will continue to grow
 - The high amount of “not sure” providers provides grey area – but this may instead be an opportunity to change minds!
- 2. Provider Concerns**
 - Providers mostly cite concerns related to time-efficiency. Other concerns demonstrate less consensus
- 3. Assessment of Current Practices**
 - Low levels of consistent assessment of lung cancer screening criteria match the low rates of screening that others have observed

Conclusion

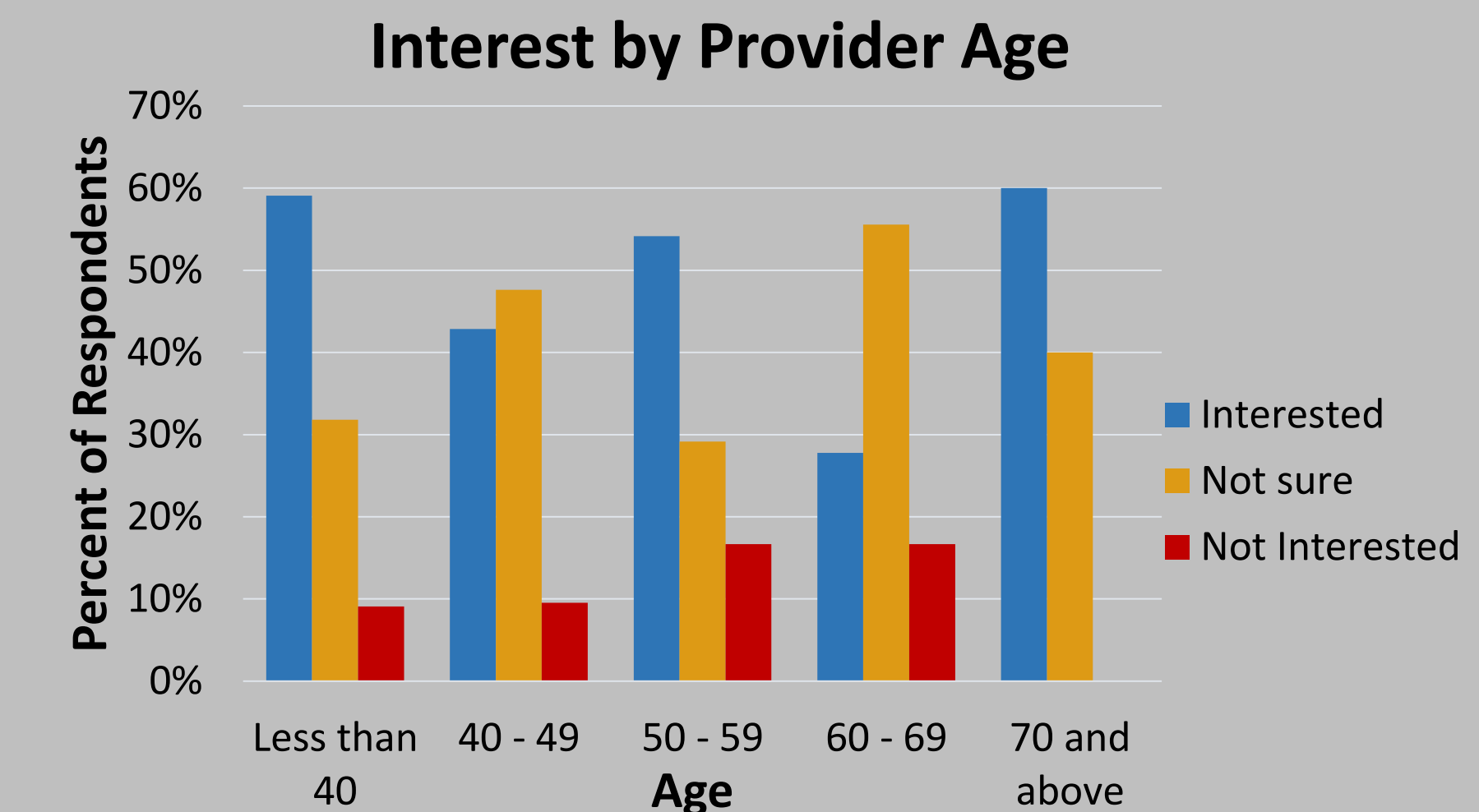
1. Approximately 50% of Texas-based primary care providers are interested in personalized LCS
2. Timeliness was the primary concern among all providers
3. The youngest cohort (aged under 40) was the most interested in personalized LCS
4. If the timeliness of the personalized approach is favorable in the future, interest may reach 70-90%

Results from Logistic Regression

Group Comparison: Interest	Odds Ratio	P Value
Age: 40-49 Vs. <40	0.259	<.0001
Age: 50-59 Vs. <40	0.594	0.035
Age: 60-69 Vs. <40	0.081	<.0001
Age: 70+ Vs. <40	1.152	0.7343
Physicians w/ LCS Eligible Volume: 10-49 Vs. <10	5.699	<.0001
Residency Training Site Vs. Non-residency Training Site	0.215	<.0001

Interest in Personalized Approach - Results from Logistic Regression Analysis

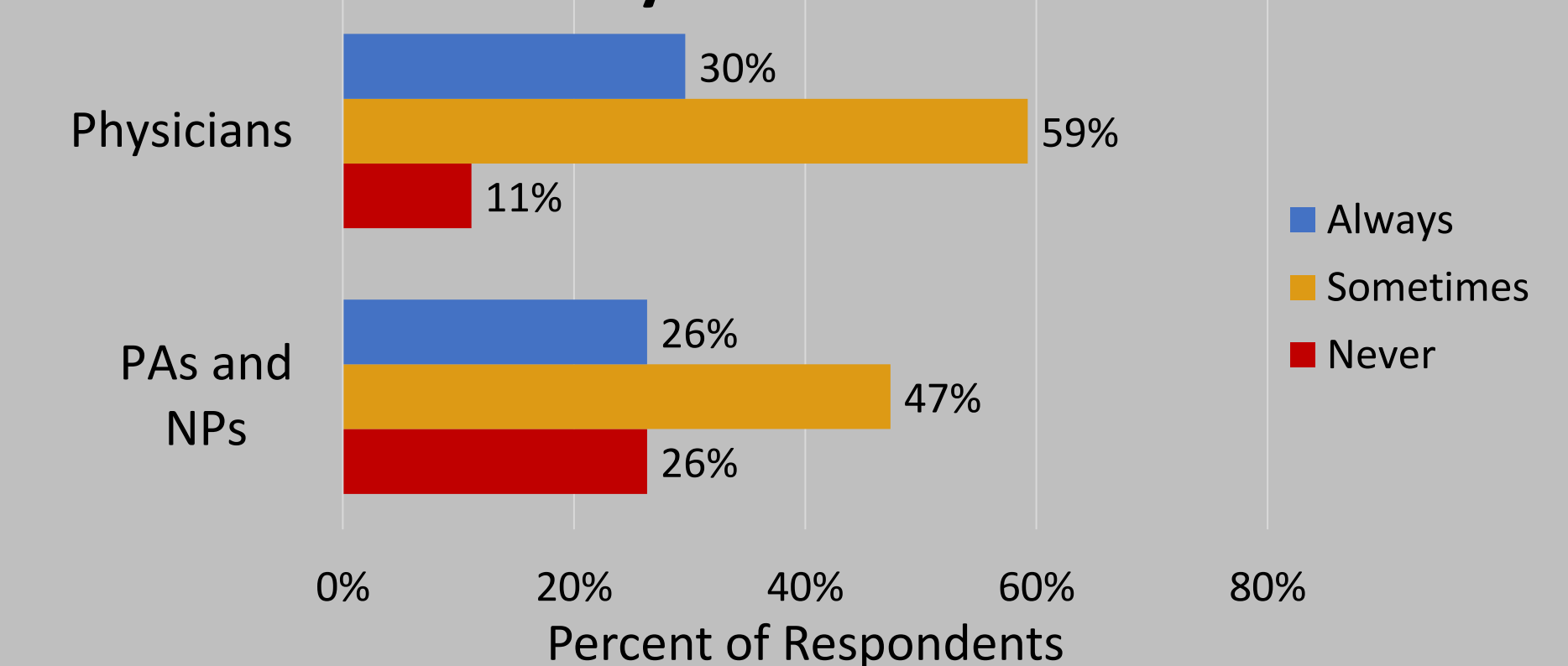
Age: Comparing each age group with <40 group.
 Physician LCS Eligible Volume: the physician-reported volume of their patients that are eligible for LCS.
 Residency Training site: whether the provider works in a training site.



Interest in personalized lung cancer screening among all healthcare providers by Age

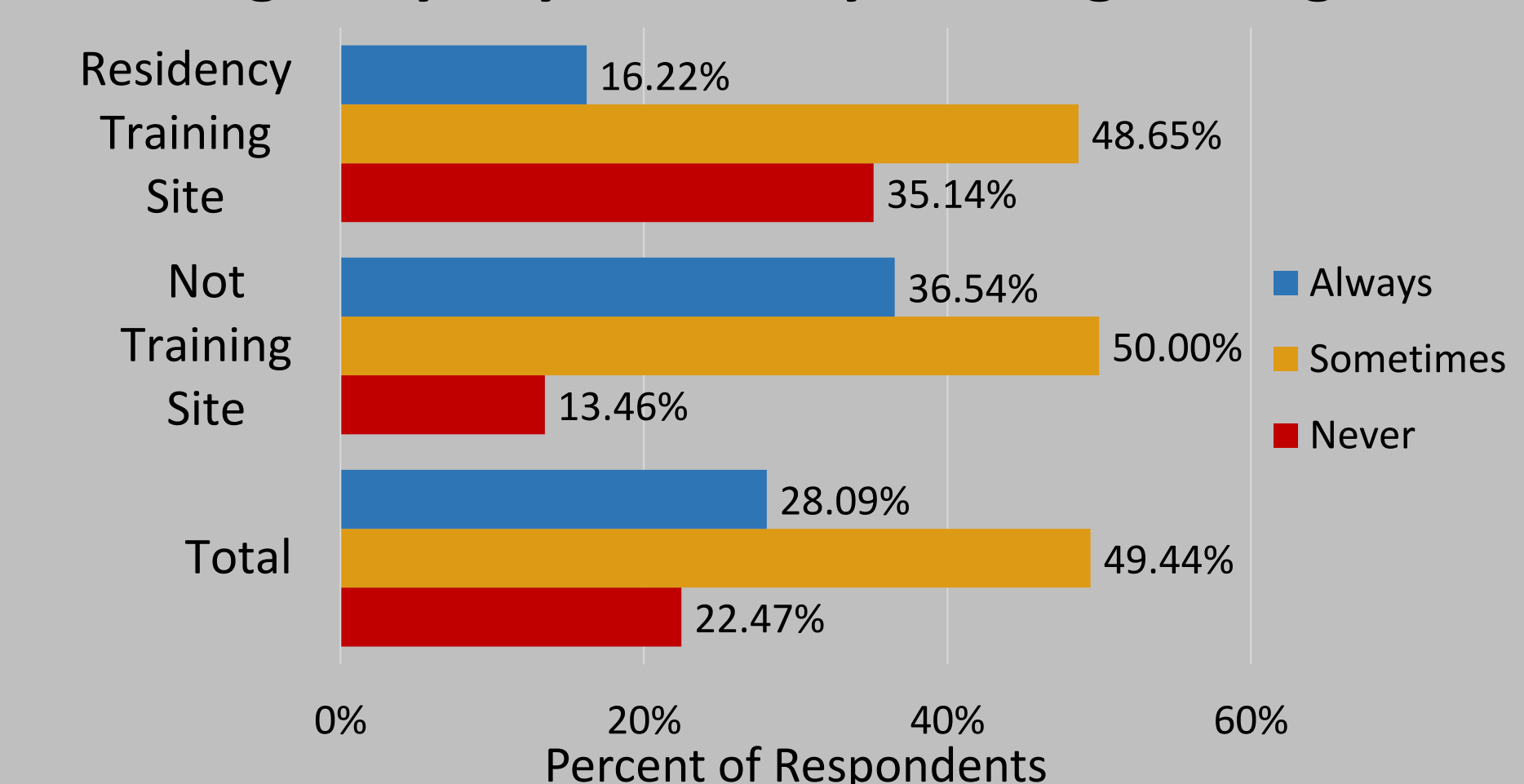
Current Practice of LCS

Assessment of Lung Cancer Screening by Profession



Current Practice – Assessment of LCS by Profession (Physicians vs PAs + NPs)

Assessment of Lung Cancer Screening Eligibility - by Residency Training Setting



Current Practice – Assessment of LCS in and outside a Residency Training Center

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