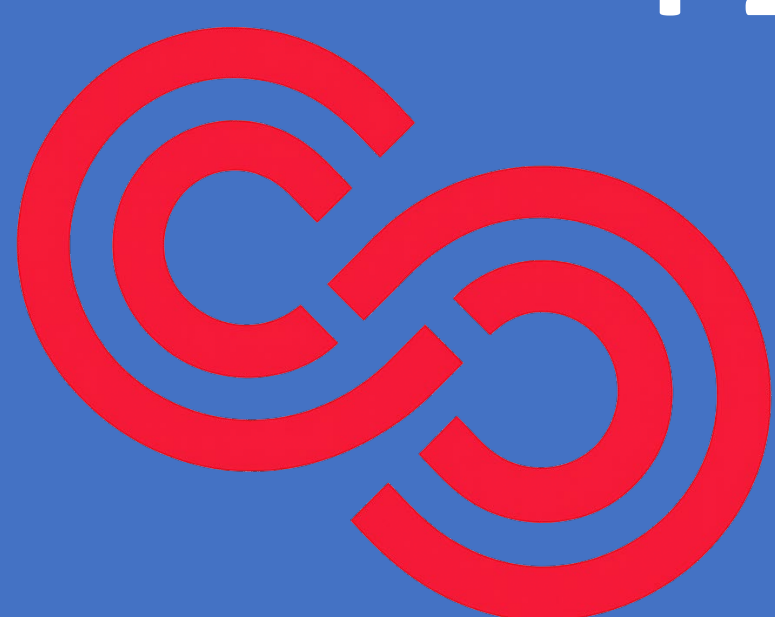


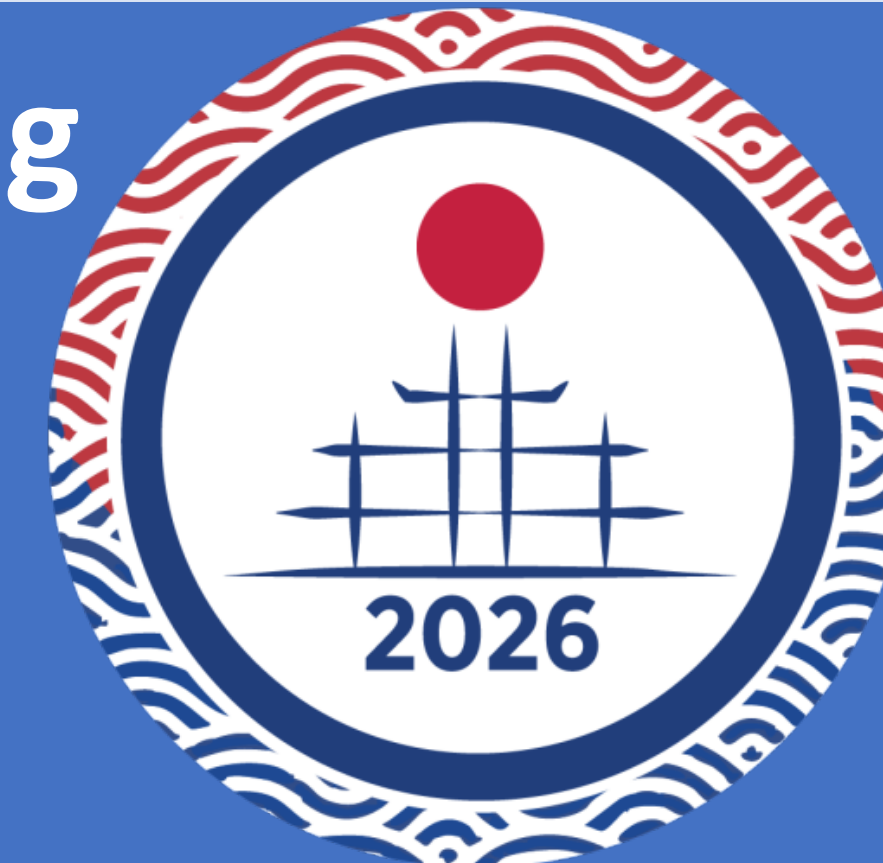


P1.092: From Outreach to Engagement: Improving Lung Cancer Screening Uptake through Bidirectional Messaging

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INTRODUCTION

- Lung cancer is often diagnosed at advanced stages, contributing to lower survival and increased healthcare costs^{1,2}
- Through a partnership with the American Cancer Society and the NFL's Crucial Catch initiative³, Cedars-Sinai, an academic medical center in Los Angeles, launched a quality improvement (QI) initiative to increase lung cancer screening uptake in primary care. The goal was a 5% increase over one year.

METHODS

- Quality improvement initiative implemented across **13 primary care clinics** within a large integrated health system
- Real-time dashboard identified patients potentially eligible for lung cancer screening who had a visit with primary care within the past 12 months and qualified based on:
 - Age **50–80 years**, and
 - Smoking history **≥20 pack-years**
- Compliance with lung screening with low-dose Chest CT was tracked
- The intervention combined **provider engagement with centralized patient outreach**
 - Initial outreach used **unidirectional messaging** through the electronic medical record **with follow-up telephone calls**
 - Based on low engagement and staff burden, the strategy was redesigned using **bidirectional messaging**, allowing patients to respond directly to outreach
 - Messages were sent on behalf of the patient's primary care physician to enhance engagement and response

RESULTS

Unidirectional
8% Response Rate

3 of 36 patients responded to unidirectional outreach

Bidirectional
39% Response Rate

81 of 206 patients responded to bidirectional outreach

Bidirectional
35% Interested in Screening
72 of 206 patients expressed interest in screening

+5% Screening Uptake

From baseline of 40% to 45% in one year

Passive Unidirectional versus Active Bidirectional Outreach Messaging

Unidirectional Messaging

Dear [Name],

Based on your health history, your care team has referred you to the Cedars Sinai Lung Cancer Screening Program.

This screening involves a low-dose CT scan, which can help detect lung cancer at an early and more treatable stage. Early detection is key, and we believe this is an important step in protecting your health.

A member of the Lung Screening team will contact you soon to discuss the next steps. For more information or any questions, please call 310-423-4496.

Thank you for taking an active role in your health.

Warm regards,

- One-way notice → repeated follow-up calls
- Low engagement and higher staff burden
- Not sustainable or scalable

Bidirectional Messaging

To: [Name]
Subject: Protecting Your Health: Lung Screening Referral from Your Care Team

Dear [Name],

Based on your health history, your care team has referred you for screening for lung cancer. This screening uses a low-dose CT scan that can help detect lung cancer early—when it is most treatable. Early detection can save lives, and screening is an essential step in protecting your health.

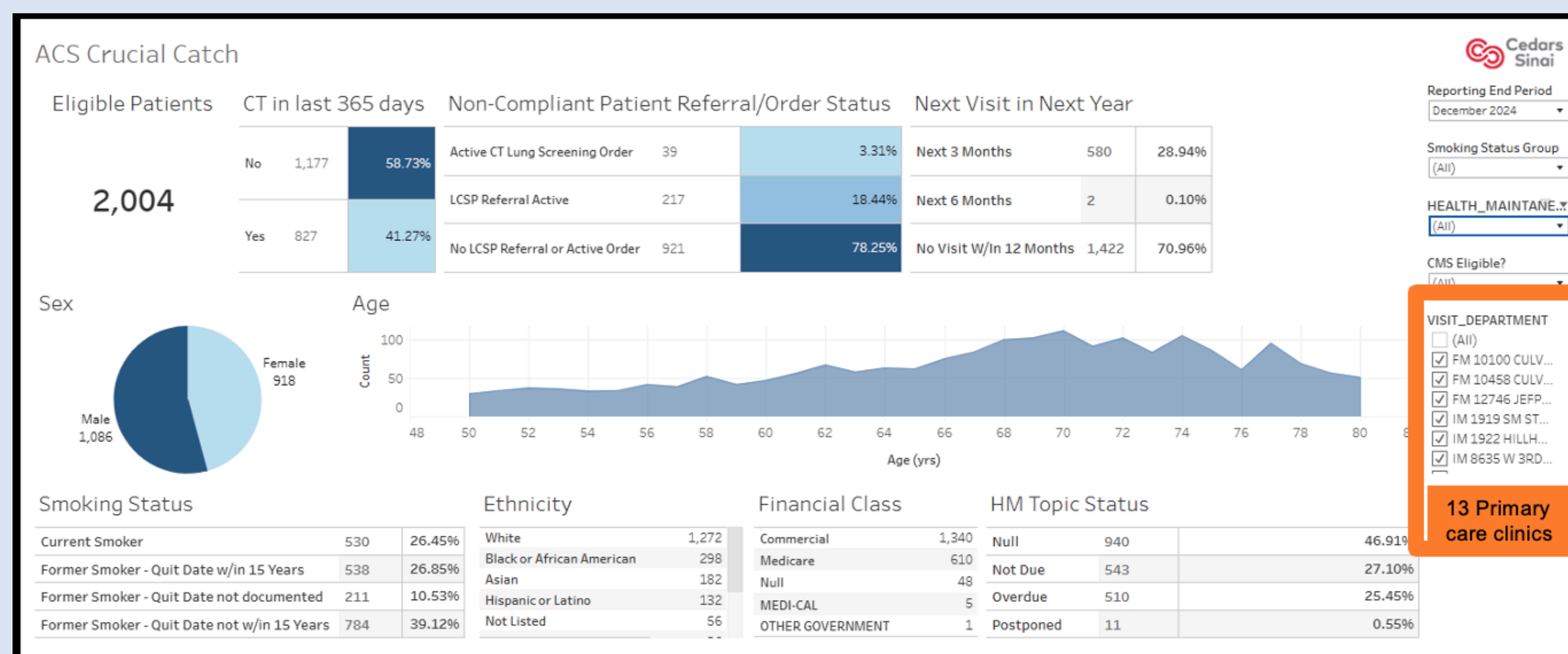
Ready to Schedule? Just reply "Yes" to this message, and a member of our Lung Screening Team will call you within 1-3 business days to guide you through the next steps.

Do you have questions? Just reply with your question or call us directly at 310-423-4496.

Thank you for taking an active role in your health.

Best,

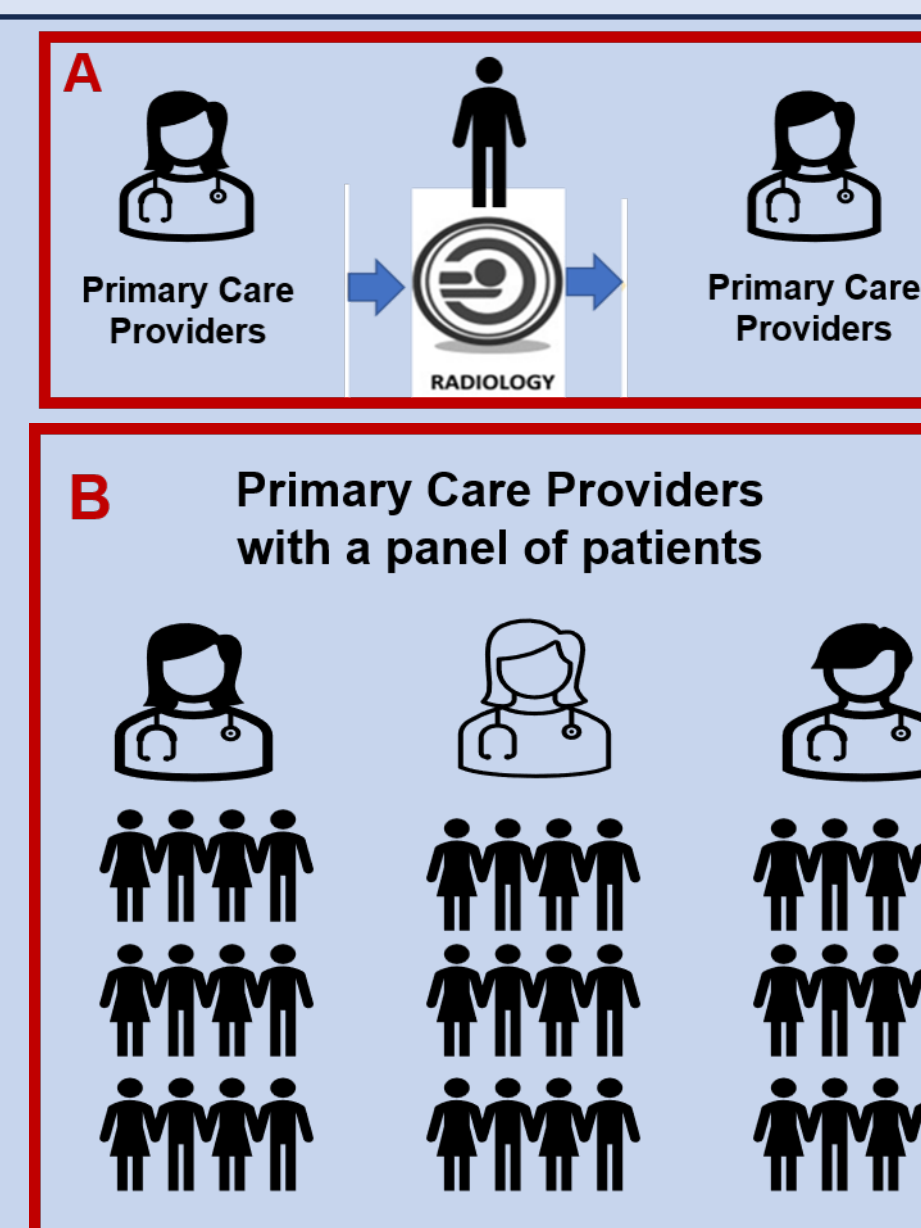
- Reply "Yes" or ask any question
- More efficient with lower staff burden
- Sustainable and scalable



Real-time dashboard capturing the eligible patients for lung cancer screening

Lung Screening Pathways

- A: Provider-managed**
- B: Centralized navigation**



Refer to the Lung Screening program



DISCUSSION

- Bidirectional messaging substantially improved patient engagement compared with unidirectional outreach
- Allowing patients to **respond directly** reduced reliance on labor-intensive telephone follow-up
- Although implemented through a centralized lung cancer screening program, much of the staff time was devoted to QI-related data tracking and outcome capture rather than outreach itself
- Without the additional QI data-collection burden, bidirectional outreach may be feasible to implement within primary care with relatively limited staff time.

LIMITATIONS

- QI initiative conducted within a single integrated health system
- Additional evaluation is needed to assess long-term screening completion and sustainability

CONCLUSION

- Bidirectional patient messaging increased engagement while reducing the operational burden of lung cancer screening outreach**
- Interactive outreach represents an efficient and scalable strategy for improving lung cancer screening uptake in primary care**

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