

P1.056: Women Enrolled in Lung Cancer Screening Through Direct Outreach in the CALM Study Are More Likely to Be Cancer Survivors

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INTRODUCTION

Lung cancer screening (LCS) reduces lung cancer-specific mortality,¹⁻³ and remains underutilized when compared to other screenings.⁴ The Coordinate A Lung Screening with Mammography (CALM) Study demonstrated that focused outreach to mammography participants eligible for LCS significantly increased enrollment.^{5,6} A history of prior cancer is associated with an increased risk of lung cancer, yet the understanding of LCS uptake among these individuals and their response to LCS outreach is unknown.^{7,8} This study compared the completion of LCS among eligible women with and without a history of cancer who received targeted outreach through CALM versus those who did not.^{5,6}

METHODS

Supported by the American Cancer Society and National Lung Cancer Roundtable, a retrospective cohort study of women undergoing LCS at an academic medical center (Vanderbilt: September 2021–October 2022) and a community-based academic hospital (Mount Auburn Hospital (MAH): January 2022–March 2023) was performed. Participants were stratified into those enrolled via direct outreach through CALM versus those enrolled without outreach. Eligible LCS participants using the 2021 USPSTF criteria were identified through electronic health record review or patient survey completion in mammography centers.³ Outreach included telephone contact with patients or notification of eligibility to the PCP. Differences in LCS enrollment were assessed using Pearson’s Chi-Square test.

DISCUSSION AND CONCLUSION

Women who enrolled in LCS as a result of outreach in the CALM study were significantly more likely to have a prior cancer history. These results underscore the potential of coordinated outreach strategies to engage a high-risk population of cancer survivors for LCS. Future interventions should incorporate survivorship-focused outreach as a scalable model to improve uptake of LCS.

Actionable Take Away Message

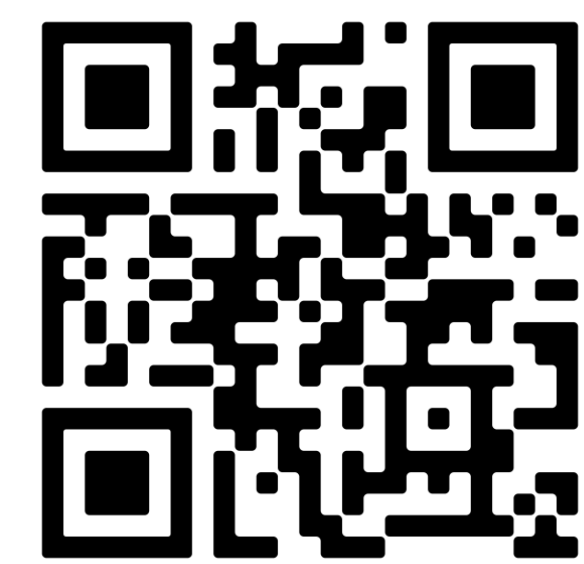
- Women with a history of cancer are at increased risk for second primary malignancy. Those eligible for lung screening are receptive to outreach to improve enrollment in LCS.

Future Direction for Research

- Future research should focus directly on lung screening outreach to cancer survivors.

REFERENCES & ACKNOWLEDGEMENTS

References



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RESULTS

A total of 726 women completed LCS: 113 with outreach and 346 without outreach at Vanderbilt, and 214 with outreach and 53 without outreach at MAH. There was no difference in race, pack-year history, or COPD prevalence by outreach status (Table 1). The mean age of women in the outreach group was younger than those without outreach (Vanderbilt: 61.7 ± 7.1 vs 62.7 ± 6.9 years, $p = 0.16$; MAH: 62.3 ± 7.6 vs 66.0 ± 9.1 years, $p = 0.003$). **Personal history of cancer was significantly higher among women enrolled through outreach compared with those without outreach at Vanderbilt (34.5% vs.14.1%, $\chi^2 = 21$, $p < 0.0001$) and MAH (27.6% vs. 3.8%, $\chi^2 = 11.4$, $p < 0.001$).** There were more women with a family history of lung cancer in the outreach population at MAH (Vanderbilt: 21.4% vs. 14.2%, $p = 0.18$; MAH: 1.3% vs.3.8%, $p = 0.024$).

Characteristic	Direct Outreach (VUMC-CALM) (n = 113)	No Outreach (VUMC) (n = 346)	p-value	Direct Outreach (MAH-CALM) (n = 214)	No Outreach (MAH) (n = 53)	p-value
Age, mean (years)	62	63	0.16	62	66	0.003
Mean pack-years	37	39	0.76	32	31	0.95
Race/Ethnicity			0.72			0.98
White	83 (73.5%)	287 (82.9%)		194 (90.65%)	48 (90.57%)	
Black/African American	14 (12.4%)	47 (13.6%)		7 (3.27%)	2 (3.77%)	
Asian	—	—		4 (1.87%)	2 (3.77%)	
American Indian	0 (0%)	1 (0.3%)		0	0 (0%)	
Other	—	—		6 (2.80%)	0 (0%)	
Unknown	2 (1.8%)	11 (3.2%)		2 (0.93%)	1 (1.89%)	
Personal history of cancer	34.51%	14.12%	<0.001	27.57%	3.8%	<0.001
Family history of lung cancer	14.20%	21.45%	0.18	17.29%	3.78%	0.024
History of COPD	13.20%	25.58%	0.23	31.78%	44.23%	0.11

Table 1. Demographic and Clinical Characteristics of Women Enrolled in Lung Cancer Screening With and Without Direct Outreach through the CALM Study at Two Programs