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Practicum Site: Vanderbilt University Medical Center - Lung Screening Program

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Improving Lung Cancer Screening Among Women Undergoing Screening Mammography

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Introduction: Lung cancer is the leading cause of cancer-related mortality for women in the US. Although low-dose computed tomography (LDCT) screening has been shown to reduce lung cancer related mortality, participation in screening programs remains low. The overall aim of this practicum project was to identify the population of women eligible for breast and lung cancer screening at Vanderbilt University Medical Center (VUMC), and measure the effectiveness of lung cancer screening enrollment interventions in this population.

Methods: A retrospective chart review was conducted of women undergoing screening mammography in September 2021 to determine lung screening eligibility based on 2017 and 2021 United States Preventive Services Task Force (USPSTF) guidelines. Providers were notified of eligible patients not enrolled in lung screening programs and offered same day breast and lung screening.

Results: There were 707 women scheduled for screening mammography in September. Of these, 642 (91%) were ineligible for lung screening, five (1%) were eligible and not enrolled per 2017 guidelines, and eight (1%) were eligible and not enrolled per 2021 guidelines. There were 31 (4%) patients who were either current or former smokers with missing pack year information in the chart. These patients were grouped in an unknown eligibility category. After contacting providers, five screening referrals (100%) were made for patients eligible per 2017 guidelines, three patients (60%) were scheduled for LDCT, and two exams (40%) have been completed. Likewise, seven referrals (88%) were made for patients eligible per 2021 guidelines, four patients (50%) were scheduled for LDCT, and one exam (12.5%) has been completed. Out of the unknown eligibility group, 17 providers were contacted, eight (26%) referrals were made, and two (6%) LDCT were scheduled.

Conclusions: This practicum project showed that despite undergoing mammography, several eligible patients are not enrolled in lung screening programs. Our project demonstrated significant impact enrolling these patients and that this population has responded favorably to provider outreach. In conclusion, interventions aimed at women undergoing other screening modalities such as mammography can improve participation in lung screening programs.

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Disclaimer: The data is part of a larger ongoing research project and not for citation at this time.