Education Level Drives Appropriate Follow-up of Incidental Findings from Lung Cancer Screening
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Clinical significant incidental findings (IFs) are common on LDCT scans performed for lung cancer screening.

Estimated prevalence of 10% based on ACR Lung-RADS.

Previous research on IFs on LDCT has focused on frequency and cost. **Limited data exists on factors that influence appropriate follow-up of IFs.**
Purpose

To identify the impact of social determinants of health on the appropriate follow-up of clinically significant incidental findings detected with LDCT for lung cancer screening
Charts of 1219, prospectively enrolled, lung cancer screening participants at our institution from January 1, 2014 to December 31, 2017 were reviewed.

Those with the Lung-RADS S Modifier were identified and reviewed to ensure the presence of an actionable clinical recommendation.

ACR guidelines were used to define appropriate follow-up.
Methods

Social and demographic characteristics (age, gender, race, education level, insurance status) obtained from initial shared-decision making visit and EMR.

Education level reported as high school graduate or less, and education past high school.

Statistical analysis performed in R to assess patient factors associated with follow-up.
109 participants with clinically significant IFs were identified, a prevalence rate of 9%.

The overall appropriate follow-up rate was 81%.

The most common IFs were
- renal cysts (18%)
- aortic dilation (13%)
- enlarged lymph nodes (9%)
- hepatic cysts (6%)
- pulmonary fibrosis (6%)
- thyroid nodules (5%)
Results

Univariate analysis for appropriate follow-up showed education level to be statistically significant.
Multivariate logistic regression for appropriate follow-up found education level to be statistically significant even when controlling for covariates.
Conclusions

Appropriate follow up of clinically significant incidental findings is a well recognized way of improving population health.

Education level is a significant independent predictor of appropriate follow-up of incidental findings, whether as an indicator of health literacy or as a surrogate of socioeconomic status beyond that of insurance.

To address these realities, lung screening shared decision making should adapt to include consideration of health literacy and numeracy.