UNC GREENSBORO
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Optimizing Lung Cancer Screening with Low-Dose Computed Tomography

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Background and Significance

Lung cancer (CA) is the leading cause of cancer-related death worldwide
- ~ **60%** initial diagnoses occur after lung CA has metastasized
- Five-year survival rate:
  - **~6%** for **metastatic** lung CA
  - **~59%** for **localized** lung CA

Lung cancer screening (LCS) with low-dose computed tomography (LDCT) can:
- Promote early detection and diagnosis of lung CA
- Increase treatment options
- Decrease overall mortality

- **USPSTF recommends annual LCS with LDCT**
- **Despite evidence LDCT utilization remains low**

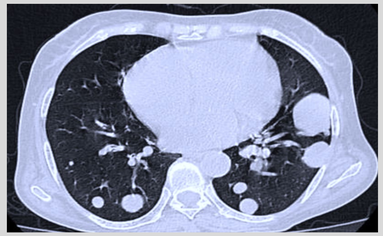
Purpose

Evaluate LCS practices at a primary care clinic
- Assess provider knowledge of USPSTF LCS recommendations
- Determine barriers to LCS
- Make evidence-based recommendations to improve LCS at clinic

Goals:
- Optimize provider recognition of patients eligible for LDCT LCS
- Increase LDCT referrals for eligible patients

Method

Design: Program evaluation with Plan-Do-Study-Act (PDSA) model
Setting: 4-provider primary care clinic in Central NC
Data Collection: Individual virtual provider interviews
Analysis: Qualitative data analyzed from interview transcripts



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Results

- **LCS practices were not evidence-based**
- **Provider knowledge of LCS recommendations and patient eligibility was low**
- **Provider-related barriers to LCS**
  - Lack of knowledge
  - Difficulty ordering LDCT
  - Fear of losing patients to a different practice
  - Time constraints
- **Patient-related barrier to LCS**
  - Patient resistance
  - Financial concerns
  - Transportation
  - Fear of a cancer diagnosis

Conclusions

Evidence-Based Recommendations:
- On-going provider education on LCS guidelines
- Cheat sheet with LCS eligibility criteria
- Use of a nurse navigator to facilitate LCS with LDCT

Limitations:
- Low provider response rate (50%)

Future Research Opportunities:
- Examine smoking history collection practices and accuracy at the clinic
- Compare number of eligible patients to number of LDCT LCS referrals to measure utilization at the clinic
- Determine patient-reported barriers to LCS
- Investigate the impact of vaping on eligibility for LCS

Image: Freepik.com

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