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Title

Facilitators and Barriers to Implementing Tribally Engaged Approaches to Lung Cancer Screening in Oklahoma – A Pilot Study

Priority 1 (Research Category)

Screening, prevention, and health promotion

Presenters

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Abstract

Context: Lung cancer is the leading cause of cancer mortality among Native Americans/American Indians. Uptake of lung cancer screening (LCS) remains very low (~5%) nationally and LCS implementation in tribal communities has scarcely been studied.

Objective: To identify implementation facilitators and barriers for a community-based LCS program in 2020-21.

Study Design and Analysis: Pre-post quasi-experimental implementation study. Mixed methods approach was used. Descriptive statistics were compiled and thematic analysis of clinician and patient key informant interviews were conducted.

Setting: A tribally tailored and comprehensive LCS program in two pilot Choctaw Nation of Oklahoma primary care clinics, as part of a larger clinical study.

Population: Patients eligible for LCS using low-dose computed tomography.

Intervention: Multi-pronged care process improvements, including benchmarking, academic detailing, practice facilitation, health system enhancements, and information technology support.

Outcomes: Fifty-six patients completed pre-intervention and 44 post-intervention surveys on their knowledge, attitudes, and experiences regarding LCS. Patient charts were extracted to determine screening uptake. Clinician and patient semi-structured interviews were conducted. Practice facilitator notes were analyzed to describe the implementation process.

Results: Mean participant age was 63. Sixty-eight-percent were current smokers. LCS up-to-dateness increased from 36% to 54%. One lung cancer positive case was identified and three more referred for further evaluation. Pre-post differences in patient experience with care remained largely the same.

About 26% reported positive change in understanding how their doctor explained their care. About 34% reported an improvement in a summary score of shared decision-making, prevention, help in making changes to prevent disease, feeling cared for, and discussion of concerns with the physician. We identified several key facilitators and barriers to LCS implementation at the practice and health system levels.

Conclusions: This study incorporated community and patient feedback to tailor LCS implementation in order to meet tribal health care delivery system needs. Several systemic factors helped change LCS acceptance and uptake and informed an ongoing cluster-randomized implementation trial. Appropriately designed community-based LCS could ultimately reduce lung cancer mortality and disparities in tribal communities.