



Objectives:

- To perform initial chart review from January to December 2019 in the eligible cohort.
- Compare that period's screening rate to DOH standard
- Share the findings with the PCP and do root-cause analysis if the participation rate is below DOH standard
- Effectively discuss and attach a reminder poster note to the PCP's PCs to introduce the updated guidelines.

Introduction:

WHO 2020 statistics show 2.26 million new lung cancer cases and 1.80 million deaths worldwide. UAE men's third most common cancer is lung cancer, with 169 (7.8%) new cases and 187 (9.9%) deaths in 2020. Adult smokers aged 50 to 80 with a smoking history of 20 packs per year who are still smoking or have quit within 15 years should get annual lung cancer screening with a low-dose CT scan, according to the US Preventive Services Task Force.

Method and sampling: Sampling and recruitment

IT specialists listed 709 medical records that met requirements. With a 95% confidence interval and 5% error margin, 277 was the sample size. 277 patient charts were reviewed using simple randomization.

A record of smoking history and if an LDCT scan is requested and performed and retrospective chart review of 277 patients in the Electronic medical records was conducted from January 2019 to December 2019.

The 2013 USPSTF lung cancer screening recommendation parameters steered the chart review. The IT department extracted the eligible patient cohort, that included smokers 55 years and older. A low-dose CT scan and smoking history were reviewed. LDCT screening participation rate was calculated and compared to the DOH guideline of acceptable participation >10% and desirable participation >12%.

Inclusion criteria:

55 – 80 years old smokers that are currently smoking or quit within the past 15 years with 30 pack-year smoking history.

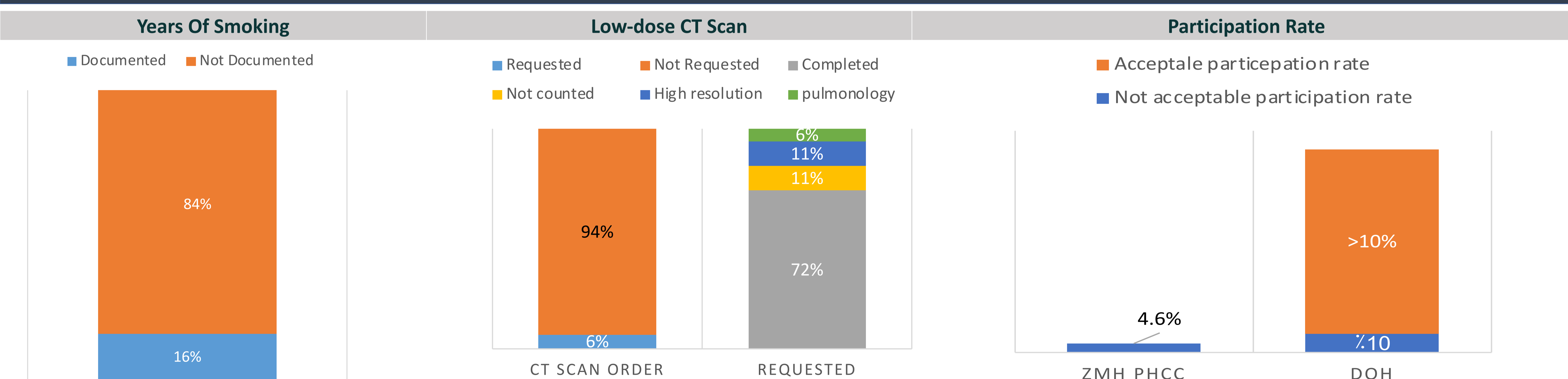
Exclusion criteria:

29 patients were excluded due to vaccination, reengagement, duplicate file name, and never smoker status.

Results:

All 277 charts, except for 11, contain information about smoking type and smoking status. However, the quantity was recorded in 52/277 charts, but the years of smoking were only recorded in 44/277 charts.

In 18 out of 277 charts, Low dose computed tomography scans were requested, and 13 of those 18 low dose Computed tomography scans were completed. The calculated rate of participation was 4.6%, which falls short of the >10% Department of health acceptable participation rate guidelines.



Conclusion:

The study concluded that our participation rate is significantly below DOH standards. In order to improve lung cancer screening rate in our community it is recommended to share the audit's findings with clinic management, medical professionals, and nurses. Moreover, review of the most recent guidelines and further educate on pack-year smoking history taking and include electronic reminders in the medical record system for smokers over the age of 50.

References:

- Zayed military hospital
- Cancer key facts, WHO (2020) <[https://www.who.int/news-room/fact-sheets/detail/cancer#:~:text=The%20problem-,Cancer%20is%20a%20leading%20cause%20of%20death%20worldwide%2C%20accounting%20for,lung%20\(2.21%20million%20cases\)%3B](https://www.who.int/news-room/fact-sheets/detail/cancer#:~:text=The%20problem-,Cancer%20is%20a%20leading%20cause%20of%20death%20worldwide%2C%20accounting%20for,lung%20(2.21%20million%20cases)%3B)>
- Lung Cancer Statistics, CDC (2022) <<https://www.cdc.gov/cancer/lung/statistics/index.htm>>
- International Agency for Research on Cancer, WHO (2021) <<https://gco.iarc.fr/today/data/factsheets/populations/784-united-arab-emirates-fact-sheets.pdf>>
- Updates Recommendation on Lung Cancer Screening, AAFP (2021) <<https://www.aafp.org/news/health-of-the-public/20210406lungcancer.html>>
- Final Recommendation statement on lung cancer screening, USPSTF (2013) <<https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/lung-cancer-screening-december-2013>>
- Final Recommendation statement on lung cancer screening, USPSTF (2021) <<https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/lung-cancer-screening>>
- DOH Lung Cancer Screening Service Specifications (2018) <<https://www.doh.gov.ae/en/resources/standards>>