

Lung Cancer Screening (LCS) Disparities in Asian Americans, 2015-2022

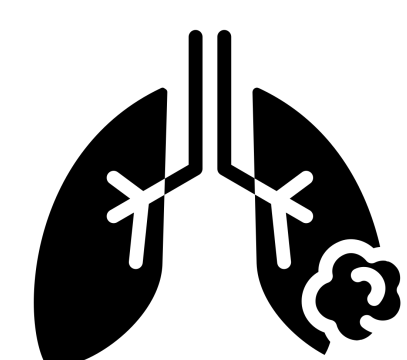
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Introduction

Lung Cancer & Screening

Lung cancer contributes **most** cancer-related **deaths**



Exceeds breast, colon, and prostate deaths **combined**

California's lung cancer screening (LCS) rate was **0.7%** in 2023



LCS is **low-risk**, **non-invasive**, and <10 minutes

Asian Americans (AsA) are historically **under screened** for cancer



Disaggregating AsA data reveals significant **heterogeneity** among subgroups

2013 Guidelines → 2021 Guidelines

- | | |
|---|---|
| <ul style="list-style-type: none"> ● 55 - 80 years old ● 30 pack-year smoking history/quit within last 15 years | <ul style="list-style-type: none"> ● 50 - 80 years old ● 20 pack-year smoking history/quit within last 15 years |
|---|---|

n = 2,273 AsA

n = 5,823 AsA

Methods

Dataset

- Cross-sectional cohort study using **Kaiser Permanente private electronic health record data**.

Integrated healthcare model

Medical treatment



Insurance coverage

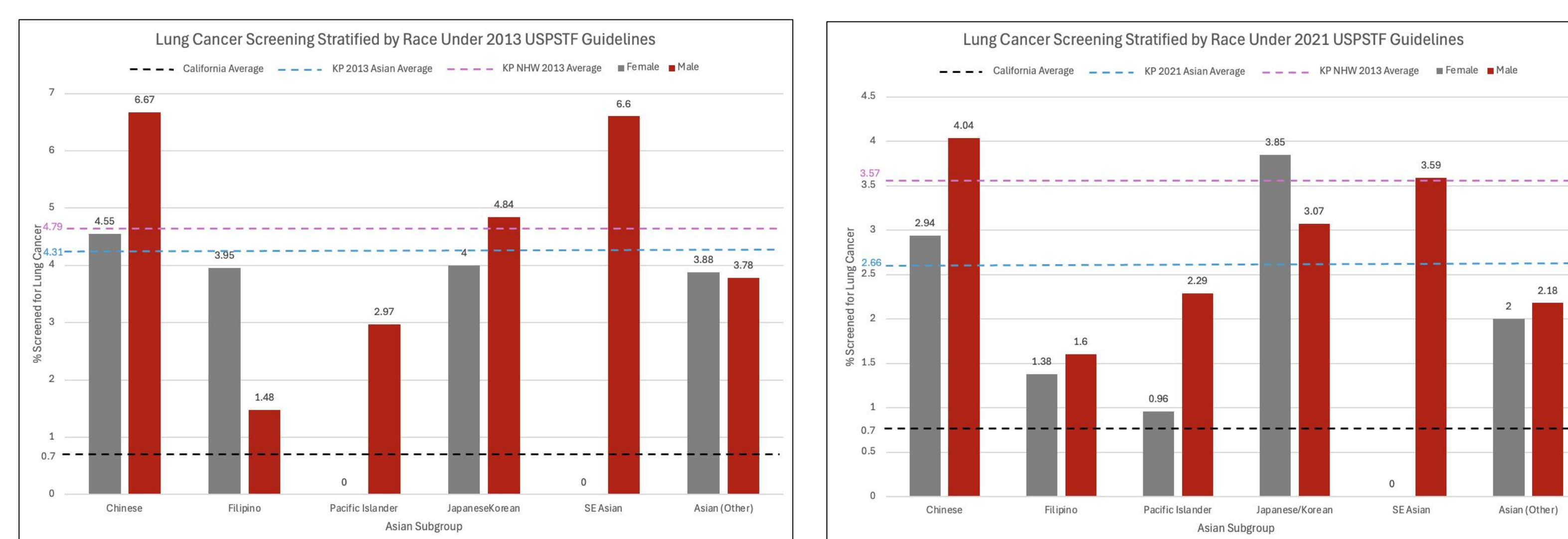
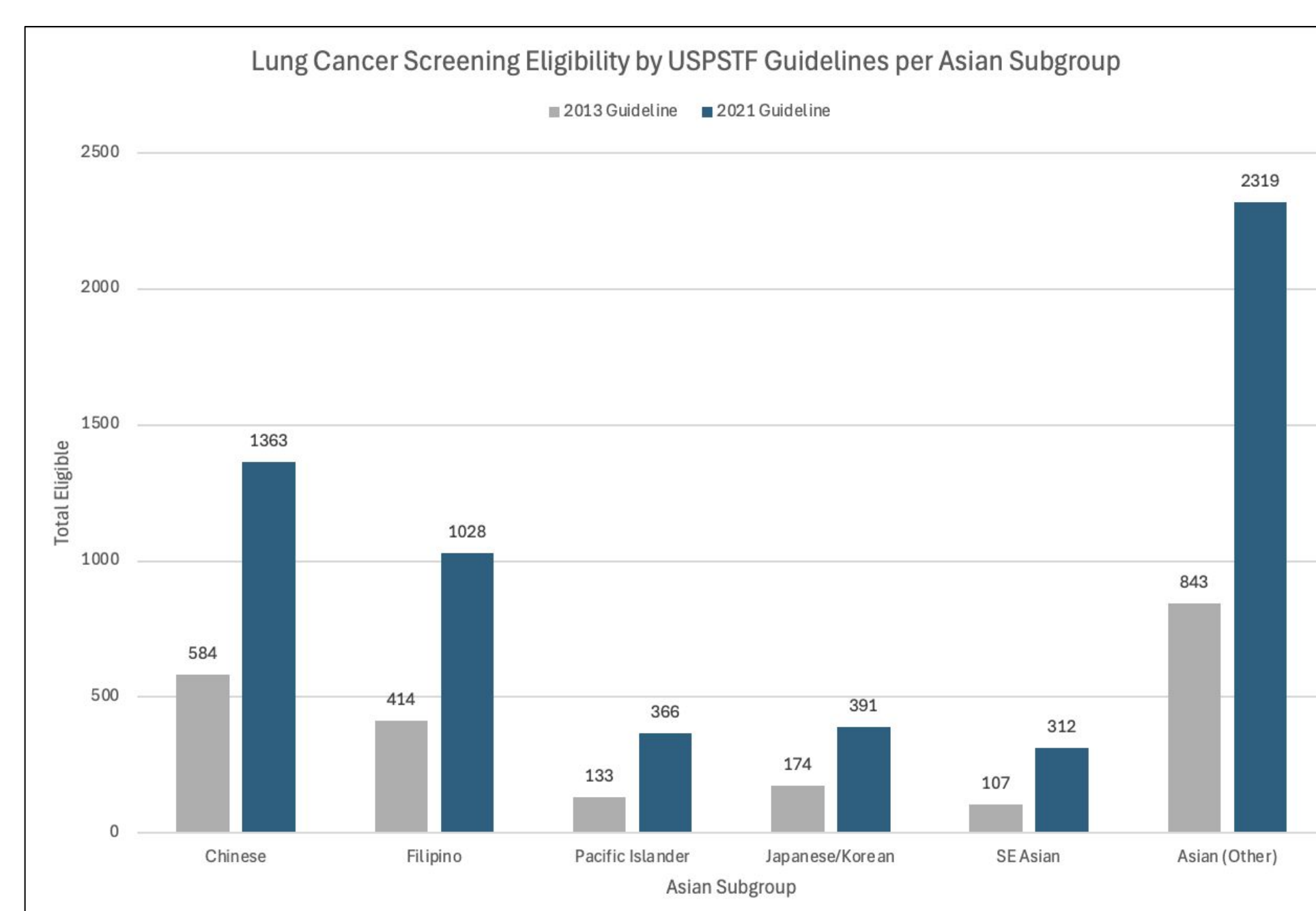
Variables

- Chinese, Filipino, Japanese, Korean, Pacific Islander (PI), Southeast (SE) Asian, Other Asian/Multiple Asian race.

Covariates Sex, USPSTF guideline year, screening year

Outcome LCS referral and uptake rates

Results



Most Asian subgroups, especially **females**, have **lower lung cancer screening rates** than Non-Hispanic **White** counterparts

Disaggregated Asian Subgroup Findings

- Highest LCS rates: Chinese males (6.7% in 2013, 4.0% in 2021) and Chinese females (4.55% in 2013, 2.94% in 2021)
- Lowest LCS rates: Filipino males and Southeast Asian (0% both guidelines) females under both guidelines.
- Under 2013 and 2021 guidelines, males had higher LCS rates, except
 - Under 2013, female Filipino and Other Asians were higher
 - Under 2021, females Japanese/Korean were higher
- Pacific Islander screening increased from 0% in 2013 to 0.96% in 2021

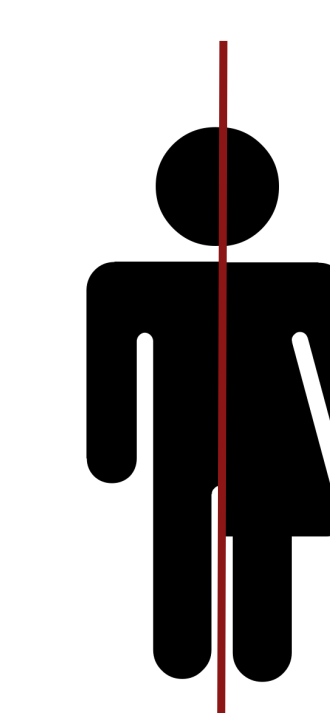
Conclusions

- Significant **heterogeneity** across Asian American subgroup LCS rates
- All Asian subgroups (except SE Asian females and PI Islander females in 2013) LCS rates significantly **exceeded California** statewide rates
- These findings **validated KP integrated health model** to increasing screening rates in marginalized groups
- 2021 expanded eligibility guidelines enabled more Asian individuals to undergo LCS (2,273 to 5,823)

Racial & Gender Disparities

- *Filipino, Pacific Islander, and Other Asian* subgroup LCS rates **below** Asian aggregate for male and female

Male **LCS rates** generally **higher** overall



SE Asian/PI female **LCS rates below California** average

These findings highlight the need to disaggregate Asian data and target LCS uptake to marginalized subgroups

Future Directions

- Identify existing structural **barriers that impede LCS in low-uptake subgroups**, such as Filipino and Pacific Islander
- Associate smoking history with population eligible and investigate respective cultural habits

Limitations

- Asian Indians are the fastest growing Asian subgroup in America but were excluded from analysis due to insufficient sample size
- Due to limited sample size, Japanese and Korean individuals along with Southeast Asians were aggregated

Abstract & References

