Center for Thoracic Disease
Thoracic Surgical Services

HEART & LUNG INSTITUTE
St. Joseph's Hospital and Medical Center

Lung Cancer Screening

2.5 year experience of Community Program in the Heart of Valley Fever Territory

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Phoenix, AZ

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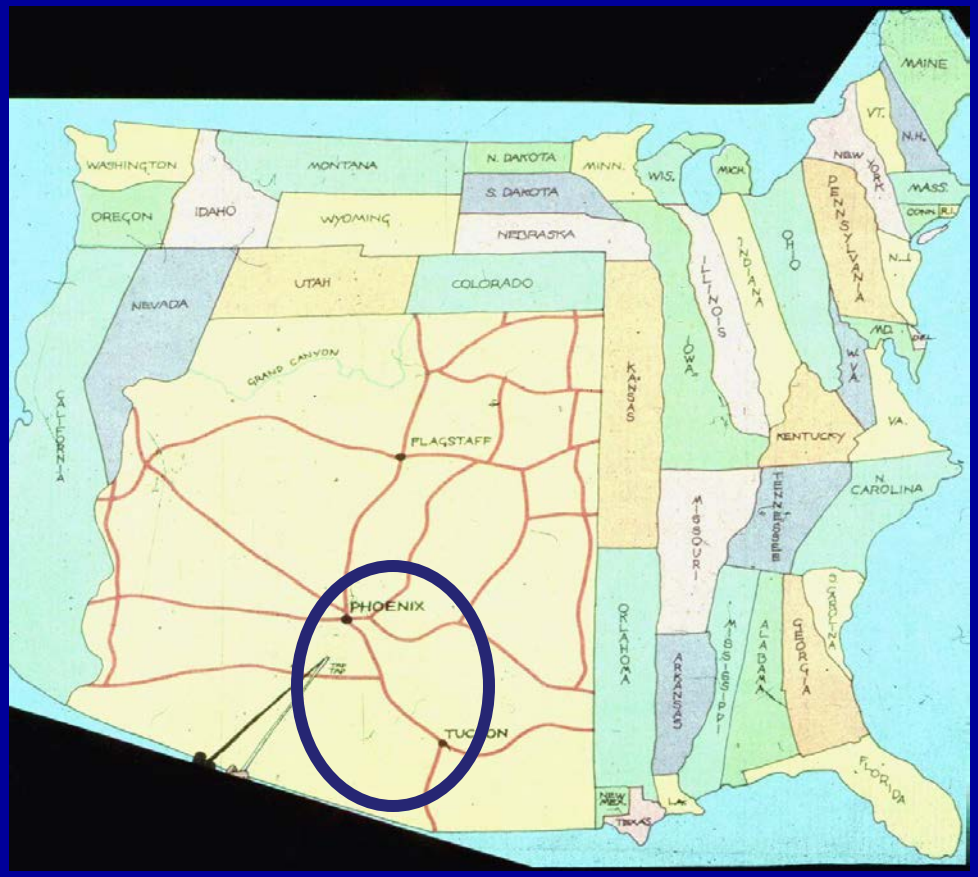
Our Program

- Located in Phoenix, Arizona at St. Joseph's Hospital and Medical Center
- Started in Sept 2011 with Patient Centered Focus
    a) Intake questionnaire and patients need to meet entry criteria
    b) Low dose CT scan that is read by 1 of 3 dedicated, fellowship trained thoracic radiologists
    c) Multidisciplinary review of every scan by (pulmonologists, thoracic surgeons, oncologists, infectious disease doctors, radiologists, cardiologists, and primary care doctors) with individualized plans based on NCCN guidelines
    d) Results are communicated to the patient and primary care doctor. The patient is given a one-one consultation with a doctor to go over results and work on smoking cessation.
    e) Patient is recorded in a database and followed

Valley Fever

- Caused by fungus in the soil
- Spores become airborne and are inhaled
- Often results in pulmonary nodules in patients
- About 150,000 cases/year in the US
- 2/3 of all Valley Fever cases in the world occur in Corridor between Phoenix and Tuscon



Can a lung cancer screening program be successful in an area with a large number of pulmonary nodules that are not lung cancer?

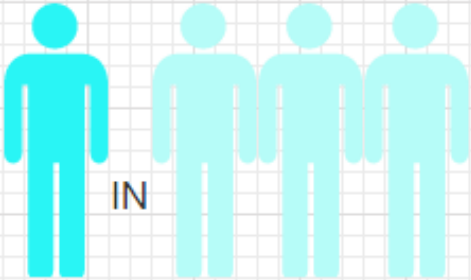
512 Calls

329 Scans

2.5 Years

50% Of Scans: Pulmonary Nodules Found

20% Of Scans: Emphysema or Fibrosis

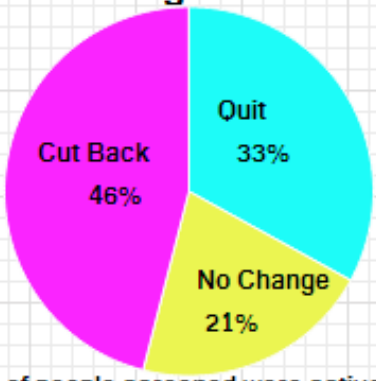


Diagnosis: Coronary Artery Disease In 30% of patients

- Cancers Found: 3 lung, 1 breast, 1 lymphoma all in time for life saving treatment
- PET Scans: 2% Biopsies: 2%
- 1 breast prosthesis rupture found

Smoking Cessation

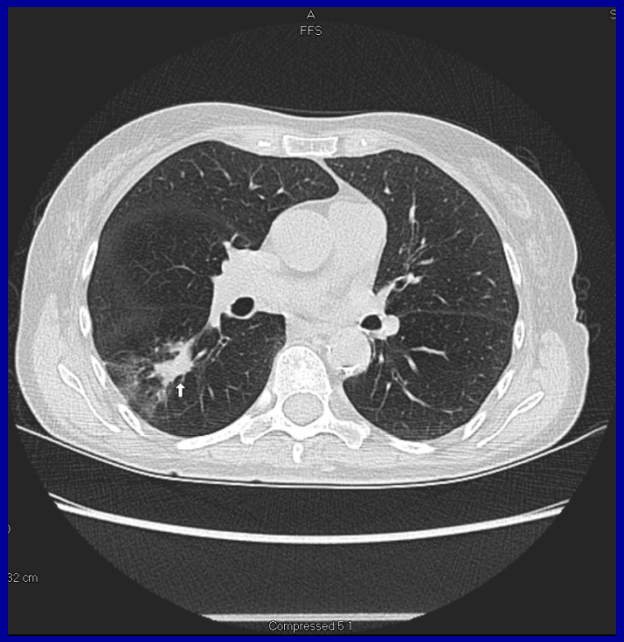
Improved Diet 35%



Increased Exercise 33%

63% of people screened were active smokers

Keys to the Program



67 y.o. 35 pack year smoker who quit 10 years ago with recent infection with 1.7 x .9 cm RLL mass

- NCCN guidelines – PET scan
- Fleshner – PET, biopsy or CT in 3 months

Our multidisciplinary recommendations:

<u>CT in 3 months</u>

- Look at each patient individually
- Pretest probability for lung cancer is based on patient and radiological characteristics. National guidelines cannot be individualized
- Incorporate the expertise of doctors from multiple specialities
- Ensure patient has a primary care doctor

Can a lung cancer screening program be successful in an area with a large number of pulmonary nodules that are not lung cancer?

Absolutely, lung cancer screening can be conducted in an fiscally responsible manner minimizing risks, unnecessary testing, and patient harm, while saving lives and resulting in important lifestyle changes in a high risk population