Rationale and Logistics of Lung Cancer Screening

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LOGISTICS OF A LUNG CANCER SCREENING PROGRAM – THE 10 PILLARS®

INTRODUCTION

Lung cancer can be detected using a screening test called a low-dose CT scan. This screening test involves the use of a low-dose CT (LDCT) scan of the chest, which takes about 10 minutes to perform. The LDCT scan helps to detect small tumors or nodules that may not be visible on standard chest X-rays. The screening test is recommended for people who smoke or used to smoke and are age 55 to 74 years old. The test may also be considered for people who have smoked less than 30 pack-years and are age 50 to 74 years old, or people with a family history of lung cancer.

The test is performed in a clinic or hospital setting, and it uses a low-dose CT scan to take images of the lungs. The test typically involves inhaling a lung-dilating agent to make the lungs more visible. The images are then reviewed by a trained radiologist to look for any abnormalities.

The test is safe and has minimal side effects. It is recommended that people who are eligible for the test get screened every year for a total of 3 years. The test is not recommended for people who are not at high risk for lung cancer.

EDUCATION

- Educate patients about the benefits and risks of lung cancer screening
- Provide information about the test and how to prepare for it
- Encourage patients to discuss the test with their healthcare provider

ELIGIBILITY

- Patients who smoke or used to smoke
- Age 55 to 74 years old
- Smoked at least 20 cigarettes per day for at least 20 years
- No evidence of lung cancer

EXAM ORDERING

- Order the test through the hospital’s pathology department
- Confirm that the patient has provided informed consent

IMAGE ACQUISITION

- Use a low-dose CT scan of the chest
- Set the slice thickness to 2.5 mm or less
- Use full inspiration and a breath hold of 5 to 8 seconds

IMAGE REVIEW

- Review the images for any abnormalities
- Use software to detect any nodules
- Follow up on any findings

COMMUNICATION

- Communicate with the patient about the test results
- Follow up with the patient if there are any findings

REFERRAL NETWORK

- Establish a referral network for patients with actionable findings
- Ensure that the patient receives appropriate follow-up care

QUALITY IMPROVEMENT

- Track the test results and outcomes
- Continuously improve the screening process

REIMBURSEMENT

- Check with the patient’s insurance to determine coverage
- Avoid delays in reimbursement

RESEARCH/FRONTIER

- Conduct research on new screening technologies
- Stay up-to-date with the latest guidelines and recommendations

CONCLUSION

- The screening test is a safe and effective way to detect lung cancer early
- Encourage patients to participate in lung cancer screening

[Image of a diagram with various sections related to lung cancer screening, such as education, eligibility, exam ordering, image acquisition, image review, communication, referral network, quality improvement, reimbursement, and research/frontier.]

[Website link: http://massgeneralimaging.org/lungscreening]