Lung-RADS is a standardized reporting mechanism used by Radiologists in interpreting the screening CT scan. Reports generated are decision oriented reports that link imaging findings with guideline based recommendations. Lung-RADS is based on the success of another screening tool used in mammography, called BI-RADS.

**FINDINGS:**
- LungRADS Category 4 scans (Concerning findings; referral recommended): 7 patients
- LungRADS Category 3 scans (Abnormal findings; LDCT in 6 months recommended): 1 patient
- LungRADS Category 2 scans (Benign appearance; LDCT recommended in 12 months): 7 patients
- LungRADS Category 1 scans (Normal LDCT; LDCT recommended in 12 months): 1 patient

**LUNG RADS CRITERIA**

- **LungRADS 1:** Negative - next LDCT in 12 months
  - Solid nodules < 4 mm
  - Ground glass nodules < 5 mm
  - Characteristically benign findings: atelectasis, scarring, calcified granuloma, etc.
- **LungRADS 2:** Benign - next LDCT in 12 months
  - Solid nodules > 4 mm but stable for > 2 years
  - Biopsy proven benign histology (e.g., necrotizing granuloma)
- **LungRADS 3:** Positive, likely benign (< 4% chance of malignancy)
  - Solid nodules 4-8 mm or ground glass nodules > 5 mm → next LDCT in 3-6 months
  - Stable nodules without documented 2 years of stability → next LDCT in 6-12 months
  - Probable infection/inflammation → next LDCT in 1-2 months, consider antibiotics
- **LungRADS 4:** Positive, suspicious for malignancy (> 4% chance of malignancy)
  - Growing solid or ground glass nodule
  - Solid nodule greater than 8 mm
  - Other findings suspicious for malignancy (adenopathy/effusion)
  - Pulmonary consultation advised
- **LungRADS 5:** Known cancer

**DISBURSEMENT OF LUNG-RADS CATEGORIES FOR INITIAL POPULATION SCANNED**

- Lung-RADS 1, 1, 6%
- Lung-RADS 2, 7, 44%
- Lung-RADS 3, 1, 6%
- Lung-RADS 4, 1, 6%

**LUNG CANCER SCREENING PROGRAM**

Wentworth-Douglass Hospital's Seacoast Cancer Center led a pilot project in 2014 to develop a Lung Cancer Screening program for qualifying patients. Lung cancer is the leading cause of cancer death for both men and women worldwide. Nearly 160,000 Americans die of lung cancer each year - however, it can be cured if detected early enough.

A screening program is an important tool in detecting cancer early. Knowing that early diagnosis and treatment are key, Wentworth-Douglass Hospital made the commitment to create a program that was both meaningful to patients and well managed from an operations standpoint. Its success was critical, so an Operations Excellence Process Improvement project was launched in April 2014, led by Project Champion, Medical Oncologist Taylor Ortiz, MD, Master Black Belt Mike Walz and Green Belt Michael Meserve, RTT. The group worked with a team of physicians, nurses, clinicians and operations staff from many areas of the hospital – including radiology, oncology, pulmonology, and...
The Lung Cancer Screening Program offers the latest low-dose computed tomography (LDCT) technology to detect lung cancer as early as possible in current or former smokers. Each patient’s chest CT scan is reviewed by board-certified radiologists with expertise in chest imaging. Patients who meet high risk criteria are enrolled in our program and qualify to receive an annual LDCT lung screening exam to discover lung cancer as early as possible.

**EARLY DETECTION SAVES LIVES**

Studies have shown that LDCT lung screening can lower the risk of death from lung cancer by 20% for people who qualify for this screening. The Lung Cancer Screening Program, as outlined in its enrollment program, is quick and easy and offers minimal radiation exposure. You must, however, be able to hold your breath for 10 seconds. No medications are given, and no needles are used. You can eat before and after the exam.

**WHAT HAPPENS DURING THE SCREENING?**

The Lung Cancer Screening Program is a practice of Wentworth Health Partners. Patients of this internal medicine practice who met certain criteria (current or former smokers between the ages of 55 and 80 who have a 30-pack/year history - smoked a pack a day for 30 years or 2 packs a day for 15) were offered a screening with a low dose CT scan as a community benefit at Wentworth-Douglass Hospital.

Within the first two months of the pilot program, 16 patients agreed to the screening - lung cancer was detected in one case, with others that have been referred for further pulmonary care.

The results have prompted the hospital to consider a gradual expansion of the program to all primary care offices within Wentworth Health Partners practices, meaning more patients will have this service available to them in 2015.