

### OBJECTIVES

Emphysema and COPD are underdiagnosed in up to 50% of patients, and often not identified until advanced stages. For these patients, options like Bronchoscopic Lung Volume Reduction (BLVR) or Lung Volume Reduction Surgery (LVRS) can have a significantly positive impact on a patient's quality of life.

B4 Symptoms, in collaboration with Lahey Hospital and Medical Center, a B4-sponsored pilot site, initiated a comprehensive screening program using 4D Medical's advanced imaging analysis software, based on Imbio Technology. This program aims to identify patients who could benefit from BLVR and LVRS therapies for advanced emphysema.

### BENEFITS

The Lung Health Clinic provides comprehensive, personalized care that significantly enhances patient outcomes through services like early COPD screening, smoking cessation support, vaccination reviews, Alpha-1 Antitrypsin deficiency screening, pulmonary rehabilitation, lung cancer screening, and access to advanced therapies and clinical trials. These services complement advanced therapies for

severe emphysema, such as BLVR and LVRS. BLVR uses endobronchial valves to minimally invasively reduce lung hyperinflation, while LVRS surgically removes damaged lung tissue. Both procedures aim to enhance lung function, reduce breathlessness, and improve the quality of life for patients.

### RESULTS

#### 1. Initial Screening

- **266 out of 2,824 scans** (9.4%) met initial criteria for advanced emphysema screening.
- **160 patients** (60%) were excluded after further clinical review for not meeting lung health criteria.

#### 2. Advanced Analysis

- **106 patients** (3.5%) were further evaluated using the Olympus SeleCT algorithm:
- **59 patients** met radiologic criteria for BLVR and are undergoing further evaluation.
- **47 patients** did not qualify for BLVR but are being assessed for LVRS.

#### 3. Clinical Opportunity

- **100 additional patients** with over 5% Low Attenuation Areas (LAA) below -950 HU are being evaluated for referral to the Lung Health Clinic for comprehensive assessment.

### 30-Day REVIEW

**59** (2.1% of patients) under evaluation for BLVR

**47** (1.7% of patients) under evaluation for LVRS

**100** (3.5% of patients) flagged for Lung Health Clinic screening

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