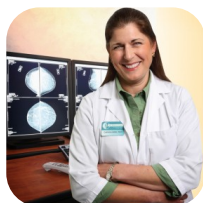


CASE STUDY

Adding Value to Radiology with Quantitative Imaging

Lung Density Analysis: a practical approach for use in a community setting



Dr. Cathrine Keller, Lake Medical Imaging

Dr. Keller is the Managing Physician for Lake Medical Imaging located in The Villages, Florida. Lake Medical has a team of 23 board-certified radiologists serving their central Florida community with a full range of radiology imaging services, for over 50 years. Dr. Keller received her MD from the University of Chicago, Pritzker School of Medicine and has practiced community radiology for more than 29 years.

Background:

Lake Medical Imaging is always looking for ways to increase the value it provides to its referring physicians and the quality of care for their patients. As part of bringing the latest advances in radiology to the community, Lake Medical was the first practice in central Florida to adopt Lung Density Analysis quantitative imaging to enable a more personalized diagnosis and treatment of COPD. Serving a community with an 80% retiree population, Lake Medical sees more than 1,000 COPD patients per year.

Patient Benefits:

Lung Density Analysis (LDA) from Imbio is of interest to Lake Medical because it offers a detailed picture of where potential COPD is present in the lungs, and a more precise evaluation of how much of the lung is affected using computer quantification. The quantitative analysis identifies areas indicative of emphysema versus air trapping and normal lung, helping referring pulmonologists tailor treatment more precisely than with PFT data alone. LMI hopes that better assessment and management of the air trapping in particular may decrease the incidence and severity of exacerbations of COPD, and therefore the trips to the emergency department or hospitalizations for patients.

The pulmonologists served by LMI see use of LDA as an important added value in patient care. Recent studies show that there are different presentations of COPD which can benefit from more individualized treatment.

"LDA is allowing us to provide more valuable information to our referring physicians and advance care for our patients with COPD. We continue to offer referring physicians educational sessions regarding LDA to promote broader adoption." - Cathrine Keller, MD

Practice Growth:

Lake Medical began offering Lung Density Analysis to referring Pulmonologists in September of 2016. After seeing the more personalized patient reports provided by quantitative imaging, LDA has grown as a requested service by 25% of referring Pulmonologists on a regular basis. Quantitative analysis has also been reimbursed for Lake Medical's Medicare patients.

The Pulmonologist's View

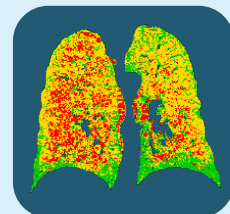
Dr. Sergio Balingit, Jr.
Pulmonology and Critical Care & Sleep Medicine. The Villages, FL



Dr. Sergio Balingit, Jr. is a pulmonologist who refers his patients to Lake Medical Imaging for radiologic work up. Dr. Balingit routinely performs spirometry and orders CT scans to screen for lung cancer on new patients who qualify. Since September 2016 Dr. Balingit also orders Lung Density Analysis on his new COPD patients. Both spirometry and Lung Density Analysis help to establish a clinical baseline, and Dr. Balingit believes LDA correlates fairly well with pulmonary function studies. Knowing the air trapping component highlighted by LDA helps support his decision to start steroid therapy, sometimes earlier than he would otherwise. Dr. Balingit also finds LDA helpful for patients with overlap syndrome (asthma and COPD).

The LDA report also supports patient communication, helping to visually review lung pathology and the patient's overall lung health.

"Using LDA helps explain to my patients what is happening in their lungs compared to using a spirometry report alone. I review the entire LDA report with patients and also use it to encourage smoking cessation for patients who still smoke."



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NOTICE: This case study was written collaboratively by Imbio, Dr. Cathrine Keller and Dr. Sergio Balingit. Dr. Keller and Dr. Balingit had final editorial approval of the case study and have authorized Imbio's use of the case study. Dr. Balingit has received no compensation from Imbio. Dr. Keller is a paid consultant for Imbio, LLC.

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