Use of Pulmonary Function Testing in Diagnosing COPD or Asthma in the Outpatient Setting
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Background: Pulmonary Function Testing (PFTs) provide important diagnostic and therapeutic implications in the management and treatment of patients with asthma and COPD. The purpose of our study was to evaluate the documentation of PFTs in the EMR for patients being treated for lung disease in our academic outpatient medicine clinic as records are transitioned from Logician to Epic.

Methods: We did a retrospective chart review on patients 18 years or older diagnosed with documented diagnoses of COPD or asthma seen in the Ambulatory Care Center, between October 2018 to December 2018. Patients deceased at time of abstraction were excluded from analysis.

Results: 113 patients were included in the study: 36 with a diagnosis of COPD only, 67 with a diagnosis of asthma only, and 10 with both COPD and asthma. Records were reviewed for at least one set of documented PFTs. Of patients with a diagnosis of COPD, 32/36 (89%) had PFTs ordered and 20/32 (62.5%) had PFTs completed. Of patients with a diagnosis of asthma, 51/67 (75%) had PFTs ordered and 36/51 (70.5%) had PFTs completed. In patients with a diagnosis of both COPD and asthma, 9/10 (90%) had PFTs ordered, and 9/9 (100%) had PFTs completed.

Conclusions: Spirometry was done in 65/113 (57%) of patients with either COPD and/or asthma in our resident run clinic.

Clinical implications: PFTs are recommended by the American Thoracic Society for diagnosis and staging of asthma and COPD. Our academic outpatient clinic records indicated a discrepancy between tests being ordered and done/documented, which is now improving with the transition from Logician to Epic. Going forward this project could be repeated to evaluate how effective the transition is and what can be done to improve the migration of records.