



BACKGROUND

- Asthma is a chronic inflammatory airway disease characterized by hyperresponsiveness¹
- The 2019 Global Initiative for Asthma (GINA) guideline recommends changes in asthma management²
- The most noteworthy change is prescribing a low-dose inhaled corticosteroid (ICS)-formoterol inhaler (i.e. Symbicort), rather than a short-acting beta agonist (SABA), for as-needed therapy regardless of severity
- An alternative is SABA paired with an ICS-containing inhaler
- In our experience at academic clinic, patients' reported diagnosis of asthma is often unconfirmed and Pulmonary Function Tests (PFTs) are difficult to access in the electronic medical record (EMR)

METHODS

- A total of 300 patients who visited our clinic in January 2022 were randomly selected
- Their current and past visits were reviewed in the EMR
- Patients were included in the analysis if there was a documented problem of "asthma" or "asthma/chronic obstructive pulmonary disease (COPD)."
- The following measures were collected:
 - 1) documentation of PFT results or an order for PFTs if absent in the EMR
 - 2) current inhaler prescriptions (i.e., SABA alone, ICS-formoterol, and SABA + ICS combination).

RESULTS

- Out of the 300 patients, 40 (13.3%) had "asthma" (n=34) or "asthma/COPD" (n=6) documented
- 14 (35.0%) had PFTs available in the EMR
 - only two included a bronchodilator test
 - six demonstrated an obstructive airway disease
- When a PFT was available in the EMR, it was documented only 42.9% of the time
- When there was no PFT, it was ordered 30.8% of the time
- 30.0% were on ICS-formoterol as one of their treatments, 27.5% SABA and ICS combination, and 32.5% SABA only

CONCLUSIONS

- Our study showed that PFTs were not documented about half of the time despite being available in the EMR
- If there was no PFT available, it was ordered less than a third of the time
- About one-third of the patients were treated with SABA only, which is inconsistent with the GINA guideline
- Further studies, including quality improvement project, are indicated with a bigger patient sample

Table 1. Characteristics of patients with asthma or asthma/COPD included in the analysis

Characteristics	No.	% or mean
Age, years (median)	40	52
Gender, Female	27	67.5%
Race & Ethnicity		
Black or African American	24	60.0%
Hispanic or Latino	16	40.0%
Translation Service Required, Yes	10	25.0%
Insurance		
Insured	32	80.0%
Charity Care	5	12.5%
Uninsured	3	7.5%
Smoking Status		
Current Smoker	11	27.5%
Never Smoker	21	52.5%
Former Smoker	8	20.0%
BMI (median)	40	34
Residency in Newark	32	80.0%

REFERENCES

1. Asthma and Allergy Foundation of America. Asthma. Electronically accessed at <https://www.aafa.org/asthma.aspx>
2. Global Strategy for Asthma Management and Prevention (2019 Update). Global Initiative for Asthma. Electronically accessed at <https://ginasthma.org/wp-content/uploads/2019/06/GINA-2019-main-report-June-2019-wms.pdf>