Inhalers are the therapeutic foundation of asthma management and widely used in the management COPD. Most patients using inhalers report a high degree of confidence in their ability to properly administer their medications, however up to 94% of patients with asthma and COPD do not use their inhalers correctly. These numbers are consistently reported throughout the literature. On the other hand, a recent survey of internal medicine residents showed that 61% were not confident in their ability to provide education on inhaler while only 32% routinely reviewed the proper use of inhalers with patients. This is troubling as improper technique leads to reduced medication efficacy and leads to a series of health-related and economic harms. Although some companies have popped up (such as Propeller Health) to fill the niche, there appears to be little momentum from clinicians to differentiate whether patients are non-adherent to medical management versus using their medications erroneously.

Goals of the Project

To improve disease impact on daily life scores (COPD Assessment Test and Asthma Control Test) for our patients with COPD and Asthma by designing an educational model that empowers residents to feel confident in evaluating inhaler technique and offering personalized instruction on how to use inhalers.
1. To improve disease impact on daily life scores for our patients with COPD and Asthma.
2. To develop lecture series for IM residents tailored toward optimizing outpatient COPD and asthma management and inhaler utilization.
3. To offer patients personalized instruction on ways to improve inhaler use by evaluating patient inhaler technique at bedside with objective criteria.
4. To evaluate degree of airflow obstruction and efficacy of treatment by peak expiratory flow rate in asthma patients.
5. To encourage cost-conscious care through optimization of prescribed inhaler regimens while potentially de-prescribing ineffectively utilized inhalers.

Current Status

Project was approved in December 2019. Resident education sessions began in February of this year. As of March 1st beginning clinic implementation.

Inhaler COPD/Asthma Resident Education Community Outreach Initiative
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Inhaler Training

Residents will first be offered a series of didactics geared toward improving inhaler recognition and optimizing inhaler technique.

In the exam room, examiner would start by asking the patient’s confidence in using his or her inhaler. Then the patient would be asked to physically demonstrate his or her technique with a training inhaler dependent on the types of inhalers he/she uses. If errors are noted, the examiner would correct the patient and encourage teach-back technique to ensure comprehension; only if errors noted would the examiner add the reimbursable inhaler training modifier to compensate for the additional time spent. An EMR template will be available to simplify documentation for examiner.

COPD

Residents will first be offered a series of didactics geared toward improving inhaler recognition and optimizing inhaler technique.

Patients will have COPD assessment scores evaluated during visits where addressed, inhalers and medications reviewed, pulmonary wellness and tobacco use screening, and possibly referral for spirometry.

Asthma

Residents will first be offered a series of didactics geared toward improving inhaler recognition and optimizing inhaler technique.

Patients will have asthma control scores evaluated during visits where addressed, inhalers and medications reviewed, pulmonary wellness and tobacco use screening, and possibly referral for spirometry.

Tobacco Use & Pulmonary Wellness

Every patient to be screened for tobacco use; cessation counseling if positive. Exercise screening; counseling for all and pulmonary rehabilitation if needed. Vaccination history review, offer if indicated.