

## Abstract 21

### Are Patients in the UMDCare Resident Clinic with Documented Asthma Being Treated with Appropriate Step-Up Medical Therapy?

Mansi Patel, MD, Anmol Mittal, MD, Alex Kaye, MD/MBA, Ameer Patrawalla, MD/MPH

**Introduction:** The UMDCare clinic cares for a population with a high asthma prevalence. It was previously established that 70.5% of clinic patients seen between October and December 2018 had pulmonary function test (PFTs) indicating asthma. Equally important to a correct diagnosis of asthma is appropriate treatment based on severity. We aim to determine if asthmatic patients are being prescribed appropriate medical therapy according to asthma severity.

**Methods:** A retrospective chart review was performed on the UMDCare clinic from October through December 2018. 50 patients were selected using a random number generator. Inclusion criteria were patients 18 years and older diagnosed with asthma which was addressed during the visit. Patients were evaluated for asthma symptoms, smoking history, and current asthma treatment. A one-sample t-test was used to determine if fewer than 35% of patients were inappropriately treated with a significance level of 0.05. Secondary outcomes included incidence of smoking, nicotine replacement use, and involvement of Pulmonology subspecialists.

**Results:** Of 77 asthmatic patients, 50 were chosen randomly. The average age was 55 years old with 74% females. 50% were African American, 46% were Hispanic, 2% were Caucasian, and 2% Asian or Pacific Islander. 20% of patients were found not to be treated in accordance with guidelines of which 20% were overtreated and 80% were undertreated. 38% of patients were smokers of which 63% were actively smoking and only 10% were using nicotine replacement therapy. 27% of patients also followed with a Pulmonologist. A one sample t-test demonstrated a p-value of 0.006, with a 95% confidence interval between 9% and 32%.

**Conclusion:** Of our sample, 80% of patients were treated according to the stepwise asthma treatment guidelines.

**Clinical Implications:** Most patients are being treated according to guidelines however the clinic can improve adherence to asthma treatment guidelines through increased promotion of smoking cessation.