reducing LOS, episode cost, and readmission risk in hospitalized Medicare patients with COPD. As such, ONS may offer an opportunity to reduce costs to Medicare while improving quality of outcomes.

**PR562 ASSESSING RACIAL AND ETHNIC DISPARITIES IN USE OF INHALED CORTICOSTEROIDS AND ITS ECONOMIC IMPLICATIONS AMONG ASTHMA PATIENTS**


**OBJECTIVES:** Asthma is the leading cause of activity limitation and has serious economic consequences on the United States health care system. The nation spends an estimated $56 billion in health care costs annually. Risk factors associated with high health care costs include use of inhaled corticosteroids. The recent economic downturn has resulted in reduced insurance coverage and copays, thereby decreasing access to asthma medications. This study aimed to examine if socioeconomic and demographic characteristics were associated with use of inhaled corticosteroids among asthma patients identified from an administrative database. METHODS: A retrospective study was done using 2010 and 2011 Medical Expenditure Panel Survey (MEPS) data to identify patients with asthma who were using inhaled corticosteroids as expressed as days of supply of medication that cover their dosage regimen. Multivariate analysis showed the average days of inhaled corticosteroid use among asthma patients was 129 days. Conclusions: The average days of inhaled corticosteroid use among asthma patients was 129 days over the course of a year. Ethnicity was shown to be a significant predictor of inhaled corticosteroid use. Hispanics were found to have significantly lower supply of medication (70 days) compared to non-Hispanics. Multivariate analysis showed that ethnicity had no effect on total health care expenditures. CONCLUSIONS: Ethnic disparities were found in the use of inhaled corticosteroids among asthma patients. However, no difference in health care expenditures shows that access is not a limiting factor for asthma care. Future research should investigate reasons for disparities in inhaled corticosteroid use among asthma patients. The main limitation of this study was that it was observational in nature.

**PR563 THE SEVERE ASTHMA POPULATION IN THE UNITED STATES: CLAIMS-BASED ANALYSIS OF OUTCOMES IN GLOBAL INITIATIVE FOR ASTHMA (GINA) STEPS 4 & 5**


**OBJECTIVES:** Increased asthma severity is associated with worsening clinical outcomes, but little is known about economic outcomes for very severe patients. The objective of the study was to assess the economic burden of asthma care utilization burden in the year before and after treatment escalation to GINA steps 4 & 5. METHODS: Using 2003-2011 MarketScan data, three asthma treatment cohorts (age 12-75) were identified: oralomalizumab, high intensity corticosteroids (HICS; ≥1000 µg/day inhalable fluticasone equivalent or oral prednison), and high-dose inhaled corticosteroids (HDICS; ≥500 to <1000 µg/day fluticasone equivalent). Inclusion required “stable therapy”, defined as three months of therapy within the first three months after the index (date of first prescription), and continuous eligibility. Negative binomial Tobit, OLS and Logistic regressions were used depending on the outcome variable, controlling for sociodemographics and chronic comorbidity. RESULTS: Of 19,227 patients, 856 initiated oralomalizumab, 6,936 initiated HICS, and 11,445 initiated HDICS. Patients had a heavy asthma polypharmacy burden which increased with increasing severity. Outpatient visits, prescription drug use, home health care and specialty visits increased from baseline to follow-up for all treatment cohorts; however, inpatient visits and ER visits declined. Annual health care expenditures increased for all cohorts, marked by for oralomalizumab (median $9,600 to $29,800). Annual out-of-pocket expenses (copayments, coinsurance and deductibles) increased and were substantial for all therapy types. (follow-up year: Oralomalizumab $2,391, HICS $1,827, HDICS $1,457). CONCLUSIONS: Patients utilized less outpatient care and required more emergency and inpatient care in the year prior to treatment escalation. Patients at the upper end of the asthma treatment continuum experienced a heavy polypharmacy burden and marked increase in out-of-pocket costs after treatment escalation to oralomalizumab or medium-high dose corticosteroids, suggesting potential room for improvement in treatment paradigms.