INHALED ANTIINFLAMMATORY MEDICATION USE AND SUBSEQUENT HOSPITALIZATIONS AMONG TEXAS MEDICAID PATIENTS WITH PERSISTENT ASTHMA
Smith M, Rascati K
The University of Texas, Austin, TX, USA

The National Heart Lung and Blood Institute (NHBLI) recommends the use of inhaled anti-inflammatory medications (inhaled corticosteroids, inhaled cromolyn, or inhaled nedocromil) for patients with persistent asthma. OBJECTIVE: The purpose of the study was to investigate the effect of inhaled anti-inflammatory medications on subsequent inpatient hospital events, while controlling for demographic and resources use variables.

METHODS: Medication and medical service records were extracted for Texas Medicaid patients who were classified as having persistent asthma based on criteria set by the National Committee for Quality Assurance (NCQA). A historical cohort design was used. An asthma-related hospitalization (with no previous hospitalization for a least six months before) served as the index event. Patients were then followed until a subsequent hospitalization occurred or until one-year past their index event. Outcomes of patient who had at least 1 prescription for an inhaled anti-inflammatory within 100 days of their index hospitalization were compared with patients who did not have any records of these types of medications for one year following their index event. Logistic regression was used to compare the two groups while controlling for other factors.

RESULTS: There were 728 persistent asthma patients in the exposed group (those with inhaled anti-inflammatory use within 100 days) compared to 981 without exposure to these types of medications. Controlling for age, gender, ethnicity, and previous resource use, those in the exposed group had 32 percent reduction in the risk of a subsequent hospitalization in the year following their index hospitalization (RR = 0.681, p = 0.017, 95% CI 0.497–0.933).

CONCLUSIONS: For patients categorized as persistent asthmatics, less than half received anti-inflammatory medications (as recommended by the NHBLI) within the first 100 days after their index asthma-related hospitalization. Patients who did receive these medications had a lower risk of a subsequent asthma-related hospitalization for the next year.