

POSTER ABSTRACTS
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Chronic Disease
03

Temporal Trends in Asthma Drug Utilization Among Adults

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Background. While asthma is a common chronic condition in adults, little is known about the utilization of asthma drugs in the adult population.

Methods. A retrospective study was conducted among asthma drug users in eight health maintenance organizations involved in the HMO Research Network CERT. Individuals who received >2 dispensings of an asthma drug during any consecutive 12-month period beginning January 1, 1990 through June 30, 2000 were identified. Information on patient age, gender, enrollment status, and asthma drugs dispensed was obtained from the HMO automated databases. The frequency of use of each asthma drug class was estimated according to patient age, gender, and calendar year. From this study population, a cohort of presumed new asthma drug users during July 1, 1997 through June 30, 1998, was identified, and the frequency of use of each asthma drug class was evaluated over a three-year follow-up period.

Results. During the study period, the use of long-acting beta agonists increased 5-fold and the use of inhaled steroids increased 2-fold, with 12% of patients receiving long-acting beta agonists and 73% of patients receiving inhaled steroids in 1999. A 7-fold decrease in the use of theophylline preparations and a 3-fold decrease in the use of cromolyn-like medications were also found. In 1999, 4% of patients received a leukotriene receptor antagonist. Older individuals were more likely to receive oral steroids and theophylline preparations and less likely to receive cromolyn-like medications and leukotriene modifiers. Among the cohort of new asthma drug users identified between 1/1/97 and 6/30/98, the most common therapies in the

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first year of treatment were short-acting beta agonists (93%) and inhaled steroids (63%). Approximately 50% of these patients did not receive any asthma drugs in the follow-up years.

Conclusions. Over the last 10 years, there has been a substantial increase in the use of long-acting beta agonists and inhaled steroids. The observed patterns of utilization likely reflect the use of these agents in the treatment of other obstructive lung disease and bronchospasm associated with respiratory infection, as well as the use for treatment of asthma.