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## THE BURDEN OF COMORBID COPD AND ASTHMA IN A MEDICARE POPULATION

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## **Abstract**

**PURPOSE:** Chronic obstructive pulmonary disease (COPD) is a highly prevalent disease that consumes an enormous amount of resources from Medicare. It is unclear whether asthmatic symptoms increase this burden. Our objective was to better understand the burden of comorbid COPD and asthma by assessing its impact on healthcare utilization and costs.

**METHODS:** We used a large health plan database to identify Medicare beneficiaries with medical and pharmacy benefits, ages 40 and older, and medical claims with International Classification of Disease, Ninth Revision (ICD-9) diagnosis codes for COPD or asthma between 1/1/2004 and 12/31/2004. We assigned patients to COPD or COPD and asthma cohorts; all others were excluded. Within in each cohort, patient's index date was the first date showing evidence of COPD or COPD and asthma. We excluded each patient who had only 1 outpatient COPD or asthma claim or were not continuously enrolled during the 12 months before and after index date. After controlling for age, gender, geographic region, and comorbidity, postindex respiratory-related emergency department (ED) visits and/or hospitalizations and costs were compared between cohorts.

**RESULTS:** We identified 8,086 patients, 6,243 (77%) in the COPD cohort and 1,843 (23%) the COPD and asthma cohort. Most patients were age 65 or older (95%), female (53%), and resided in the Northeast (75%). Patients in the COPD and asthma cohort were more likely to have acute events (ED visits/hospitalizations) than patients in the COPD cohort (OR = 1.4; 95% CI, 1.6, 1.7) and had \$1,931 (SE = 336.50, p < 0.0001) more respiratory-related total healthcare costs. Mean adjusted respiratory-related total healthcare costs for the COPD cohort was \$5,204 compared with \$7,135 for the COPD and asthma cohort.

**CONCLUSION:** Medicare beneficiaries with COPD and asthma are more costly and use more services than those with COPD without asthma. These patients may be more unstable.

**CLINICAL IMPLICATIONS:** Medicare beneficiaries with asthma and COPD may be more unstable than those with one of these conditions alone.

**DISCLOSURE:** Christopher Blanchette, No Product/Research Disclosure Information; Employee Christopher Blanchette is an emlpoyee of GlaxoSmithKline.

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10:30 AM - 12:00 PM