Aims

- Asthma related exacerbations represent a major burden for patients and for healthcare systems. Understanding the patterns of resource use and costs of these events is important for decision-makers.
- Main goal: to describe healthcare resource use and direct medical costs of severe asthma exacerbations in the private healthcare system in Brazil.

Methods

Orizon is an administrative database, representing approximately 13% of the Brazilian private healthcare plans.

- Asthma-related severe exacerbations were defined as any emergency room visit (ER) or hospital admission, using the following primary ICD-10 codes: J45, J46, J11, J12.8, J12.9, or J13-18. Additional codes (J20, J96.0, R05 and R06) were included when associated with systemic corticosteroid use.
- Exacerbations were considered different episodes if they occurred more than 7 days apart.
- Event Validation: the codes cited above were selected from scientific literature and validated by a pulmonologist and a general practitioner with experience in private healthcare setting.
- Costs are presented in United States Dollar (USD)*

Results

Mean age: 36.8 years (SD 15.2)
63% were female (n=1,414)

Patients from the second year of follow-up identified as having asthma-related severe exacerbations.

Identification phase

Jan 2010 – Jun 2014

Follow-up

≥ 1 severe exacerbation/year over a period of 2 years

ICD 10 – J 45 Asthma patients

≥ 18 years old

Orizon patients

Patients were followed until June 30th, 2016, death or inactivation in the insurance plan, whichever occurred first.

Results refers to the second year of follow-up for patients who demonstrated to have at least one severe exacerbation per year

Patients with 4 or more exacerbations

- Mean length of stay = 9 days, three times the average of the asthma patient in the public system
- 35.4% of them needed to be admitted to the Intensive Care Unit (ICU) at least once.

Conclusions

The resource use and the direct medical costs of patients with frequent severe exacerbations increased as the number of severe exacerbations increased. The costs of these events were, on average 3 times (PPPY) higher if patients required ER or hospitalizations. Identifying and preventing patient with frequent hospitalizations could reduce the burden to the healthcare system in Brazil.

References


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