Objective

Acute exacerbations are common complications of chronic obstructive pulmonary disease (COPD) with a significant impact on patient quality of life. The main objectives of the study are to describe the hospital management and estimate the burden of acute exacerbations of COPD (AECOPD).

Methods

DATA EXTRACTION

STUDY PERIOD

DESIGN
Population-based retrospective study of the PMSI-MCO (French National Hospital Discharge Database - Medicine, Surgery, Obstetrics) database, a comprehensive collection of all inpatient stays in France and using International Classification of Diseases, 10th Revision (ICD-10) codes.

DATA EXTRACTION
All 2015 and 2016 hospital stays with ICD-10 codes for AECOPD were extracted. Hospitalisations for an AECOPD were defined using the validated algorithms by de Léotoing L. Each patient included before June 30th, 2016 was followed-up for 6 months after their discharge from the index stay and additional hospitalisations for AECOPD were retrieved, according to the same criteria. Therefore, a focus for new interventions and education should be made to decrease this level of spending in future.

STUDY POPULATION
Patients ≥ 40 years old with at least one hospitalisation for an AECOPD.

FOLLOW-UP OF PATIENTS
For each individual, the index stay was defined as being the first hospitalization for AECOPD in 2015 or 2016. Each patient included before June 30th, 2016 was therefore followed-up for 6 months after their discharge from the index stay and additional hospitalisations for AECOPD were retrieved, according to the same algorithms.

ECONOMIC EVALUATION
For each patient, total in-hospital medical resource consumption associated with the hospitalisations was documented. Costs were attributed from official French national tariffs and expressed in 2018 Euros.

Conclusion

This study confirms the high epidemiological and economic burden of the hospitalisations for AECOPD in France. A focus for new interventions and education should be made to decrease this level of spending in future.