

Objective

Acute exacerbations are common complications of chronic obstructive pulmonary disease (COPD) with a significant impact on patient's 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

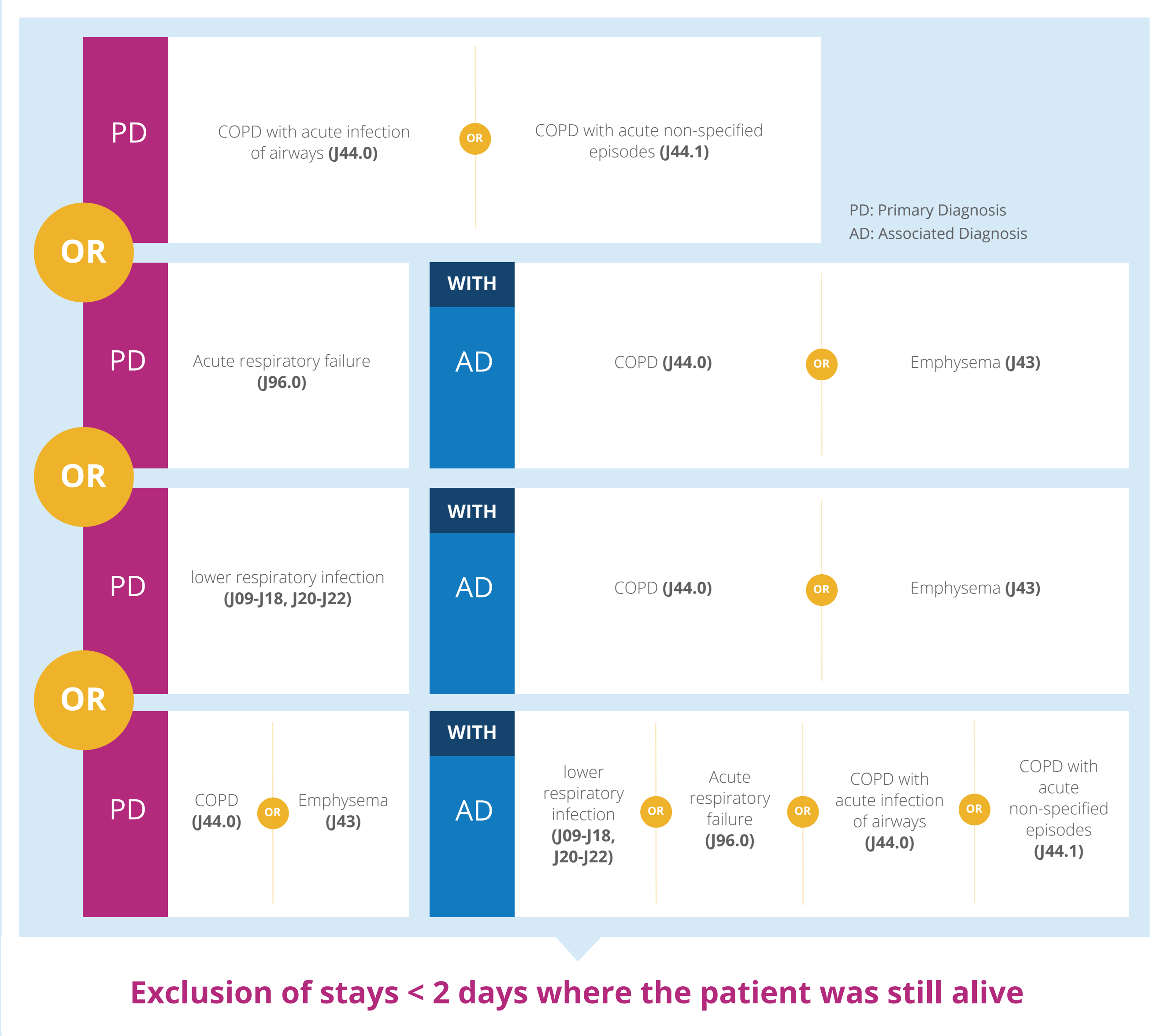
January 1st, 2015 to December 31st, 2016.

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 Santé publique France (narrow and broad definition)<sup>1</sup>. The narrow algorithm only is presented hereby.



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

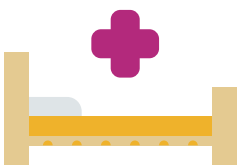
For each patient, total in-hospital medical resource consumption associated with the hospitalisations was documented. Costs were attributed from official French national tariffs and expressed in 2018 Euros.

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.

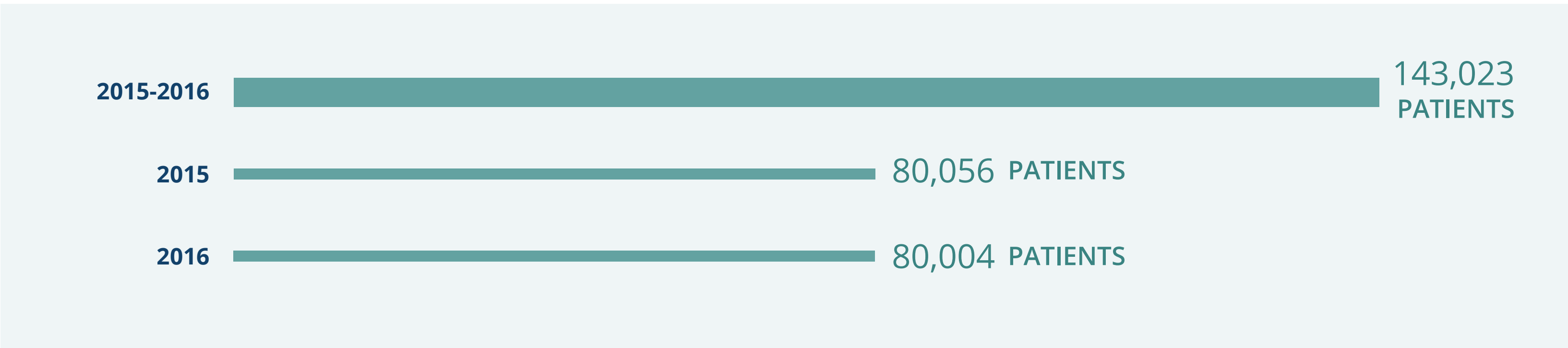
Hospital management of acute COPD exacerbation and impact on hospital re-admission in France

Results



PATIENTS AND AECOPD STAY CHARACTERISTICS

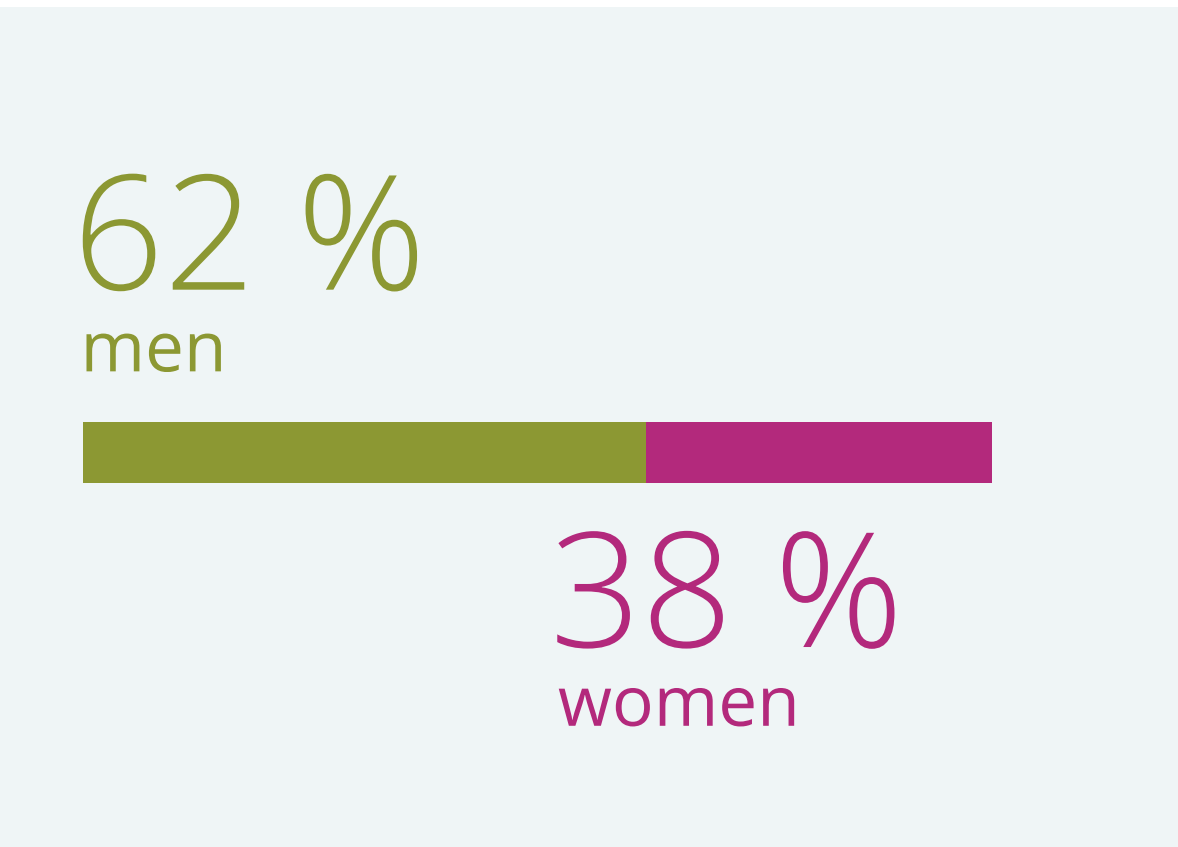
Number of patients with ≥ 1 AECOPD stay



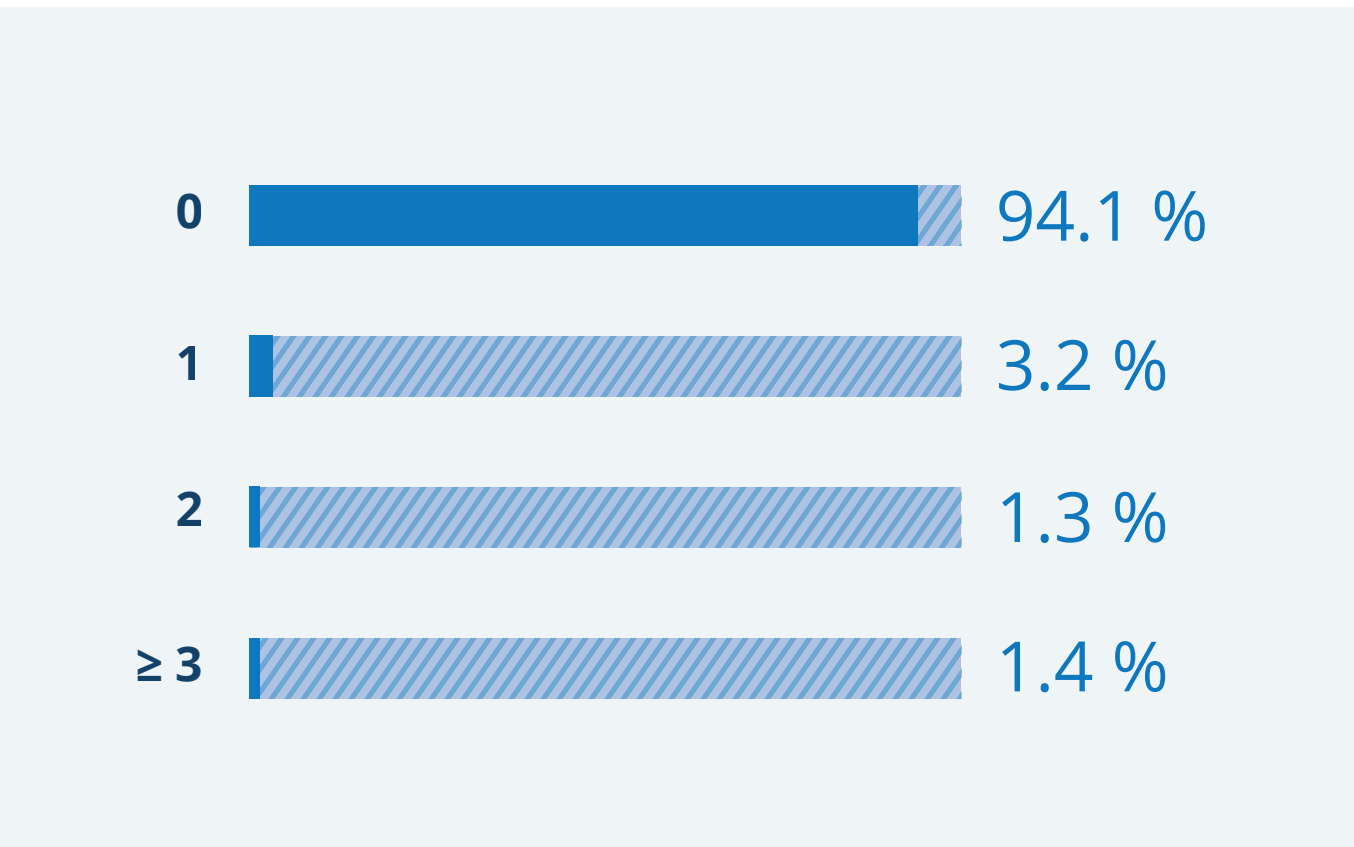
Mean age (± SD)



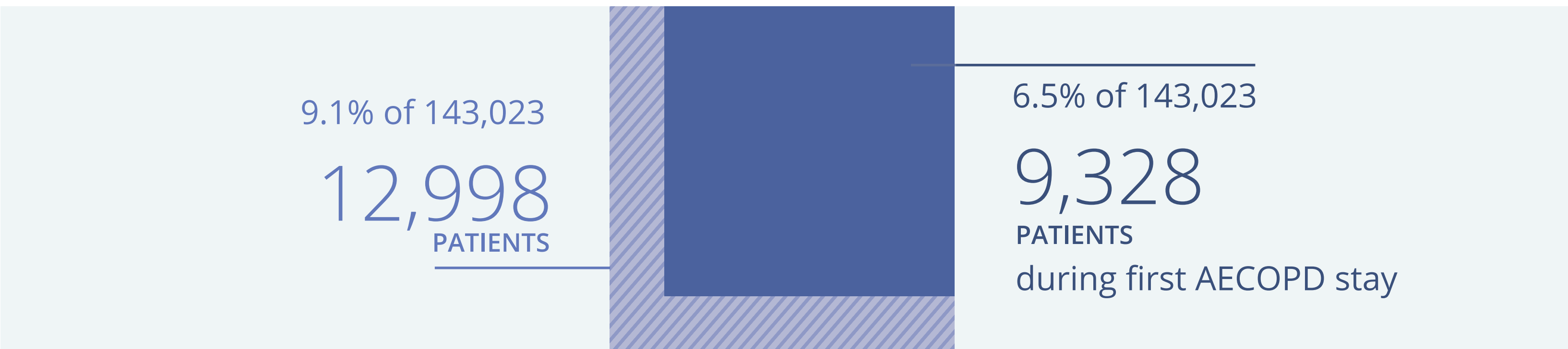
Gender



Previous hospitalisation for AECOPD within 1 year before



In-hospital death within 30 days after first AECOPD stay



ICU (intensive care unit) during first AECOPD stay

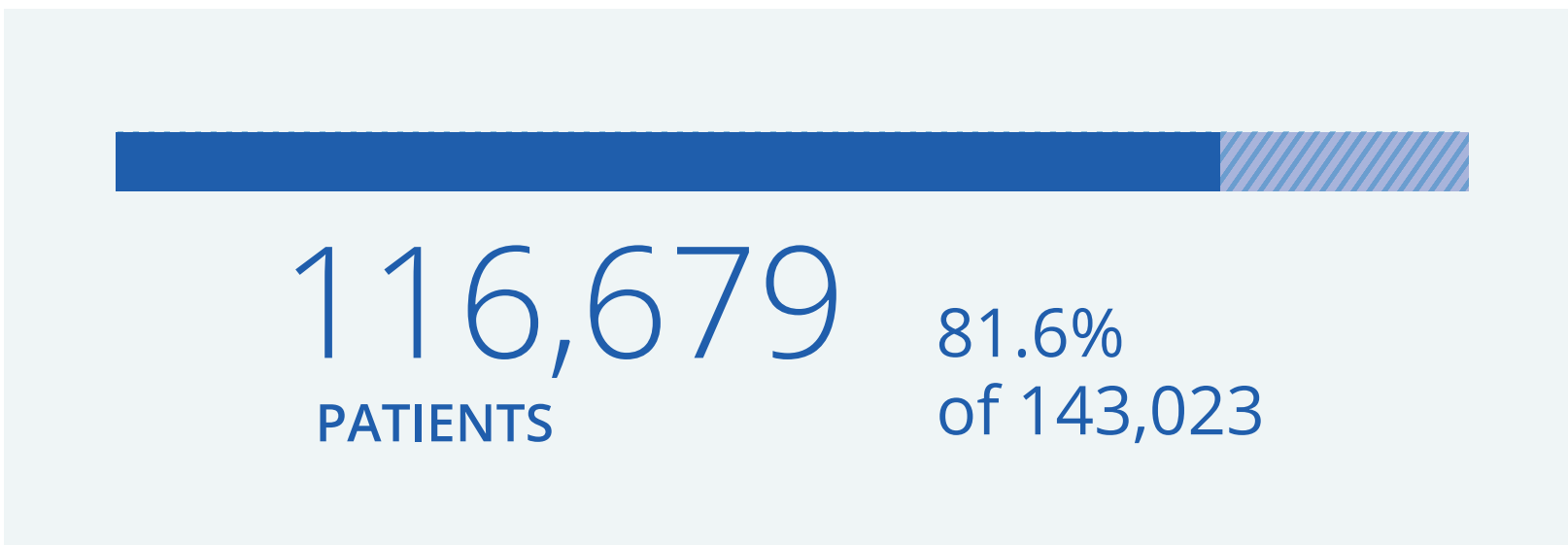


Mean length of the first AECOPD stay (± SD)



PATIENTS FOLLOWED-UP ≥ 6 MONTHS

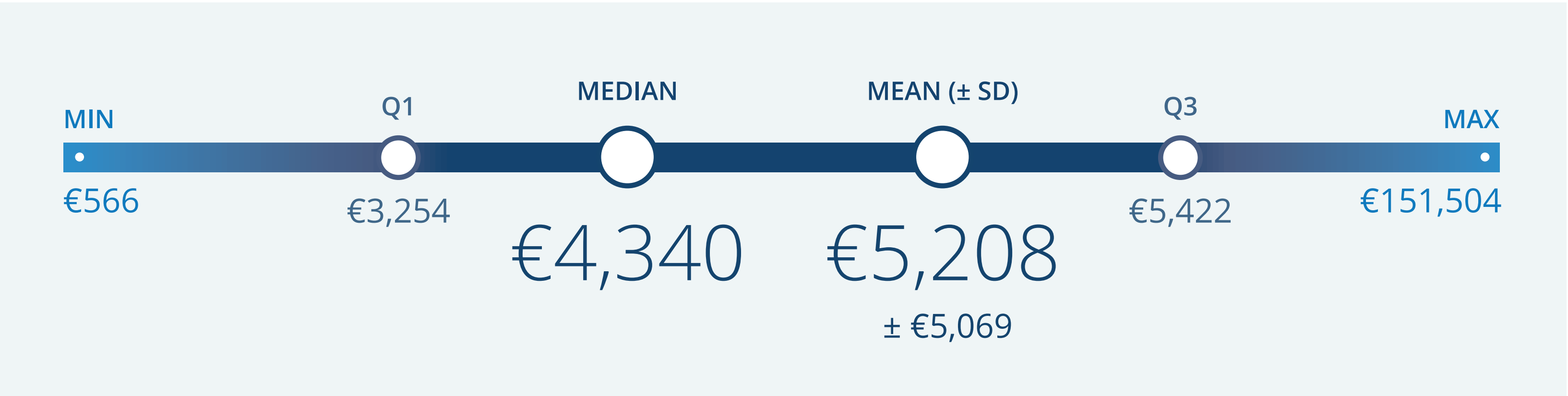
Number of patients followed-up ≥ 6 months



Patients with ≥ 1 rehospitalisation for AECOPD within 6 months



Cost of the first AECOPD rehospitalisation



<sup>1</sup> <http://invs.santepubliquefrance.fr/Dossiers-thematiques/Maladies-chroniques-et-traumatismes/Broncho-pneumopathie-chronique-obstructive-et-insuffisance-respiratoire-chronique/Surveillance-epidemiologique-de-la-broncho-pneumopathie-chronique-obstructive-et-de-l-insuffisance-respiratoire-chronique-en-France> (updated March 7th, 2017; cited October 4th, 2018)

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