

# COST OF COPD HOSPITALIZATIONS IN THE BRAZILIAN PUBLIC HEALTH SYSTEM

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ORIGIN Health

## INTRODUCTION

Chronic obstructive pulmonary disease (COPD) is a chronic disease that affects more than 300 million people globally, being the fifth cause of death considering all ages. (1–3)

Also, is the fifth most common cause of hospitalization in the Brazilian Unified Health System (SUS). (4)

## OBJECTIVE

This study aims to describe COPD hospitalization patterns and its costs in SUS, from 2016 to 2021.

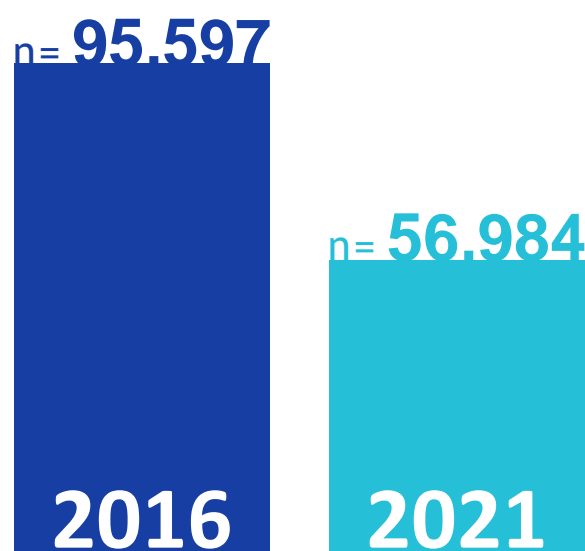
## METHODS

A retrospective analysis was conducted in the Brazilian Hospital Information System (5), from 2016 to 2021, using ICDs J43 and J44 for COPD. Data collected were hospitalization year, number of hospitalizations, total hospitalizations costs, number of hospitalizations with intensive care unit (ICU) stay and total costs of ICU hospitalizations. Descriptive analyses were performed to evaluate these data and an average cost was calculated. Costs values were presented as 2022 Brazilian Real (BRL).

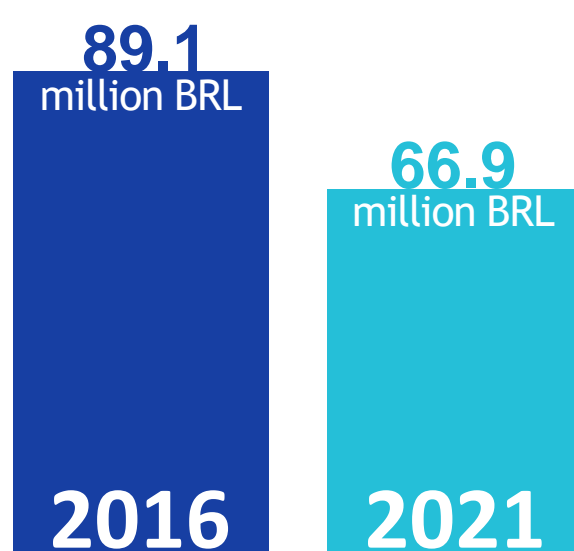
## RESULTS

A decrease was observed for hospital admission numbers between 2016 and 2021 (from n=95,597 to n=56,984) and for total costs (varying from 89.1 million BRL in 2016 to 66.9 million BRL in 2021).

Hospital admission numbers



Total costs



However, the mean cost per admission showed an increase, since the reduction of hospital admission was bigger than total cost reduction.

Year	N of hospitalizations	Total costs (BRL)	Mean costs (BRL)
2016	95,597	89,074,204.88	931.77
2017	98,489	95,511,813.83	969.77
2018	91,412	92,486,296.48	1,011.75
2019	91,066	94,100,374.23	1,033.32
2020	56,858	62,470,497.74	1,098.71
2021	56,984	66,882,711.23	1,173.71

•A slighter reduction in the number of hospitalizations with ICU stay (2016: 5,799 hospitalizations; 2021: 4,784 hospitalizations) and respective total costs (2016: 33.4 million BRL; 2021: 31.9 million BRL) were observed in the period.

•Also, the mean total cost for hospitalization with ICU stay showed an increase from 5,763.24 BRL/ hospitalization with ICU stay in 2016 to 6,683.77 BRL/ hospitalization with ICU stay in 2021.

## CONCLUSION:

Despite the reduction in total hospital admission and hospitalization with ICU stay number from 2016 to 2021, total costs seem to not decrease in the same pace, resulting in an increase of mean costs of COPD hospitalizations in SUS.

## REFERENCES:

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