

Socioeconomic benefits of the Brazilian INSS AtestMed programme

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Abstract

This study analyses forecast modelling with time series for INSS (National Social Security Institute) expenses related to the AtestMed programme within the Brazilian Welfare and Pension System. The AtestMed is a recent socioeconomic initiative by the Brazilian government; it designs a new and more efficient system for processing temporary disability benefits. It aims to streamline and reduce delays in the processing and payment of compensations within the public social security system, thereby leading to significant savings by shortening periods of disability.

The dataset includes monthly monetary data from January 2021 to September 2024, adjusted for inflation using the National Consumer Price Index (INPC). The study examines the behaviour of INSS costs with and without the AtestMed programme, noting that the programme was implemented in July 2023. The methodology employs six different time series models, such as Simple, Holt and Holt-Winters Exponential Smoothing, ARMA, ARIMA, and SARIMA models, to analyse cost trends.

By comparing total costs with and without AtestMed, this approach offers a deeper understanding of both chronological and seasonal trends in INSS spending, enables the anticipation of variations, and optimises socioeconomic management. The forecasts generated from this study aim to support improved strategic decision-making within the scope of social security.

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