

Budget Impact of Including Cannabis-Based Products in Brazil's Public Health System: A Scenario Analysis

Lula MD¹, Portela R², Silva ML³, Guerra Júnior AA¹, Ruas CM¹

¹Universidade Federal de Minas Gerais, Belo Horizonte, MG, Brazil;

²Université de Bordeaux, Bordeaux, France.

Author Contact: maridlula@gmail.com

Objectives

To estimate the **budget impact** of listing **cannabis-based products** into **Brazil's Health National System (SUS)** for selected clinical indications and to assess the financial feasibility of different coverage scenarios.

This study aims to **support public policy decision-making** by projecting potential costs associated with national access to these therapies.

Methods

A **Budget Impact Analysis (BIA)** was conducted from the perspective of the **public payer**, considering a **5-year time horizon** (2026–2030) with no discount rate applied. The analysis included **two indications**: **treatment-resistant epilepsy** and **spasticity associated with multiple sclerosis**. Eligible populations were estimated using **national epidemiological data**, and unit drug costs were based on **current market prices in Brazil**. It was assumed that standard-of-care treatment costs would remain unchanged. A **market share** ranging from **10% to 50%** was assumed progressively over the five-year period. Three coverage scenarios were simulated:

1
Restricted access to patients with treatment-resistant epilepsy

2
Restricted access for patients with multiple sclerosis experiencing spasticity

3
Coverage for both conditions

Results

The projected cumulative budget impact over five years was **BRL 7.0 billion** for the **epilepsy-only scenario**, **BRL 210 million** for the **multiple sclerosis-only scenario**, and **BRL 7.2 billion** for the scenario covering **both conditions**.

Costs increased with broader clinical coverage and higher market uptake. Indirect cost savings related to improved health outcomes were not considered.

Table 1 – Budgetary impact of incorporating cannabis products into the Unified Health System under different scenarios, 2026-2030

Scenarios	2026	2027	2028	2029	2030	Cumulative
Scenario 1 – Epilepsy	R\$462,697,814	R\$928,625,960	R\$1,397,523,987	R\$1,869,157,668	R\$2,343,309,404	R\$7,001,314,834
Scenario 2 – Multiple sclerosis	R\$13,880,934	R\$27,858,779	R\$41,925,720	R\$56,074,730	R\$70,299,282	R\$210,039,445
Total	R\$476,578,749	R\$956,484,739	R\$1,439,449,707	R\$1,925,232,398	R\$2,413,608,687	R\$7,211,354,279

Conclusion

Listing cannabis-based products into Brazil's SUS would result in a **substantial budget impact**, especially under broader adoption scenarios. Financial sustainability could be enhanced through negotiated **pricing**, **clear clinical guidelines**, and **phased implementation**.