

# Temporal Analysis of Drug Costs in Portugal (2010-2023): Implications for the Portuguese National Health Service and Patients

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- 1

The increase in pharmaceutical expenditure was higher for patients than to the national insurer
- 2

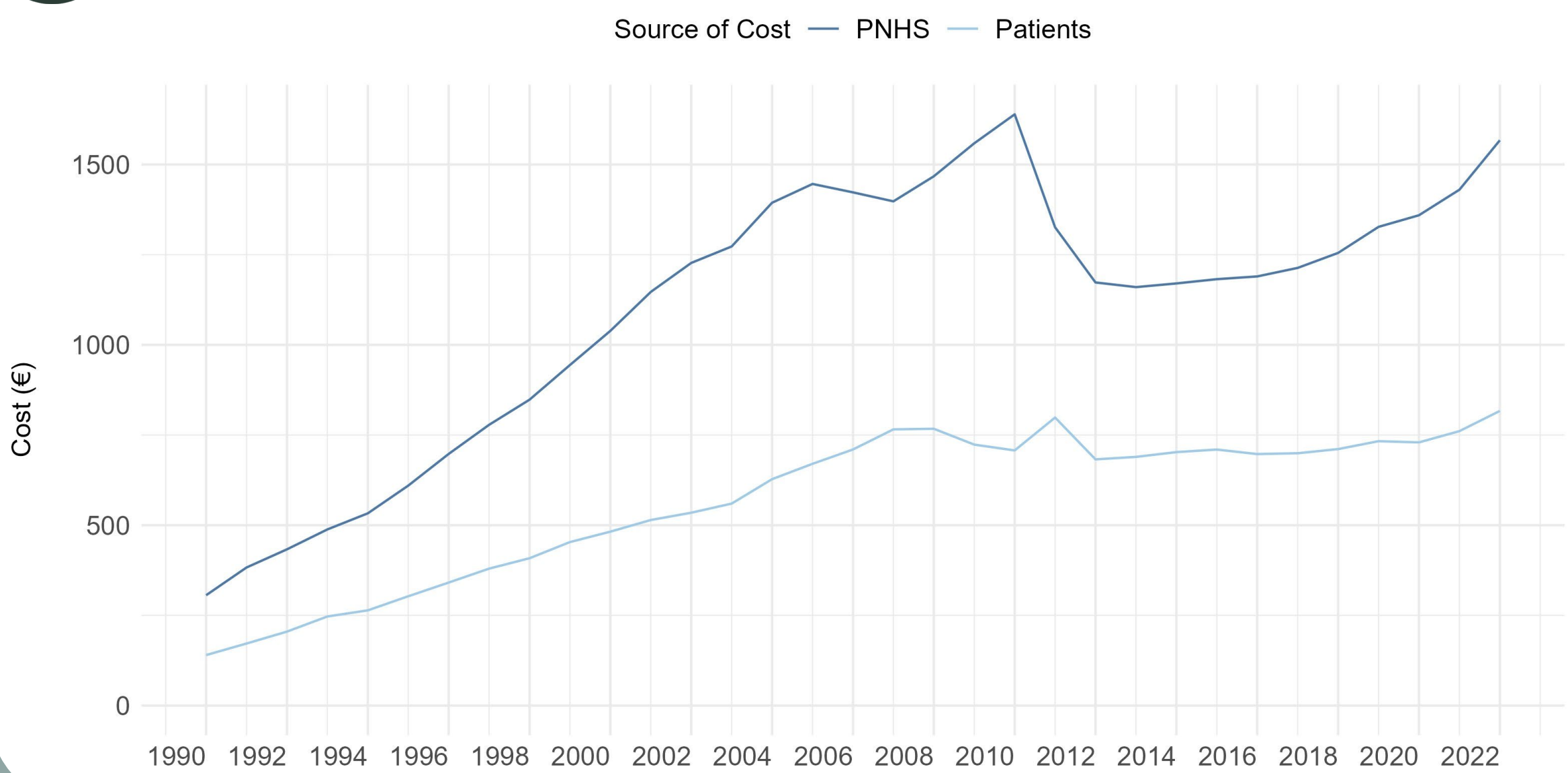
More pharmaceuticals suffered a cost reduction for the national insurer than for the patients
- 3

An interactive dashboard was created to consult and compare drug prices and their evolution

**Introduction:** According to the Portuguese Constitution, the state should ensure access to necessary healthcare, regardless of the citizen’s economic condition. However, Portuguese patients’ direct payments amount to 30% of the total healthcare expenditure – almost twice the European average. **Objective:** To describe the cost dynamics of the top 41 selling drugs in Portugal in 2022, from 2010 to 2023, and analyse implications for both the national insurer (the Portuguese National Health Service [PNHS]) and out-of-pocket (OOP) patient costs. **Methods:** Complete retail prices, reference prices, reimbursement percentages, reimbursement values, PNHS costs and OOP costs for the drugs were compiled by HMR and provided by DECO PROteste. Absolute and relative cost changes for each drug were calculated. Therapeutic groups included anti-diabetics, agents acting on the renin-angiotensin system, lipid-modifying agents, analgesics and antipyretics, and antidepressants. The dashboard was created using R version 4.2.2 and the “shiny” package.

## Results

1 Fig. 1 - Pharmaceutical's expenses variation for PNHS (412%) and Patients (484%) Per person, per year | Data from PORDATA (2023-06-23)

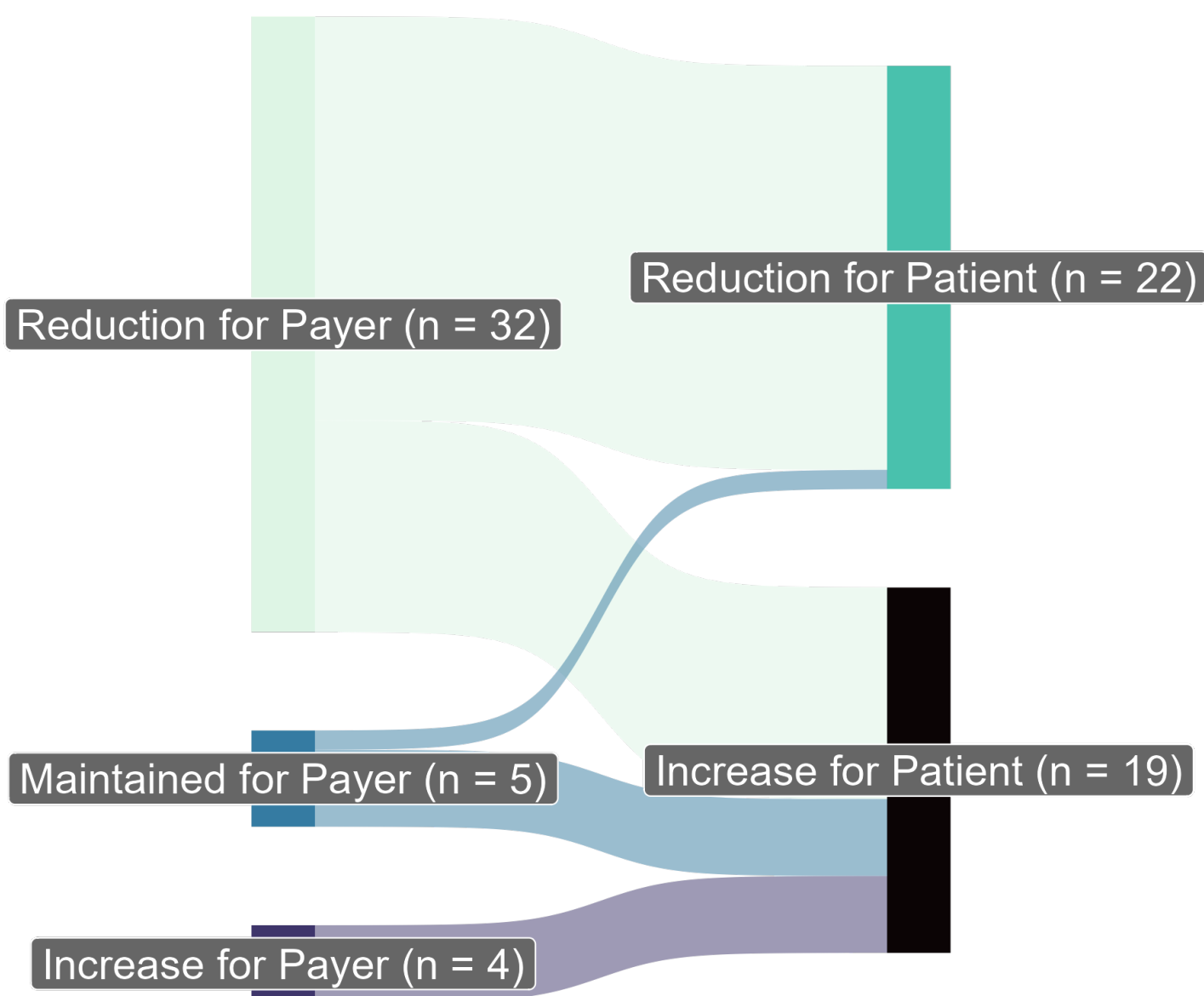


2 **Patients cost** varied between -€17,86 and +€23,90.

**PNHS cost** varied between -€40,11 and +€2,53.

Reimbursement percentages remained constant.

Fig. 2 - Price variation trends comparison



## 3 Pick Cost Type

## Pick Prescription Drug

Price for Payer (PNHS), Price for Patient (▼)

Coversyl - Comp revest 5mg 30, Diamicron

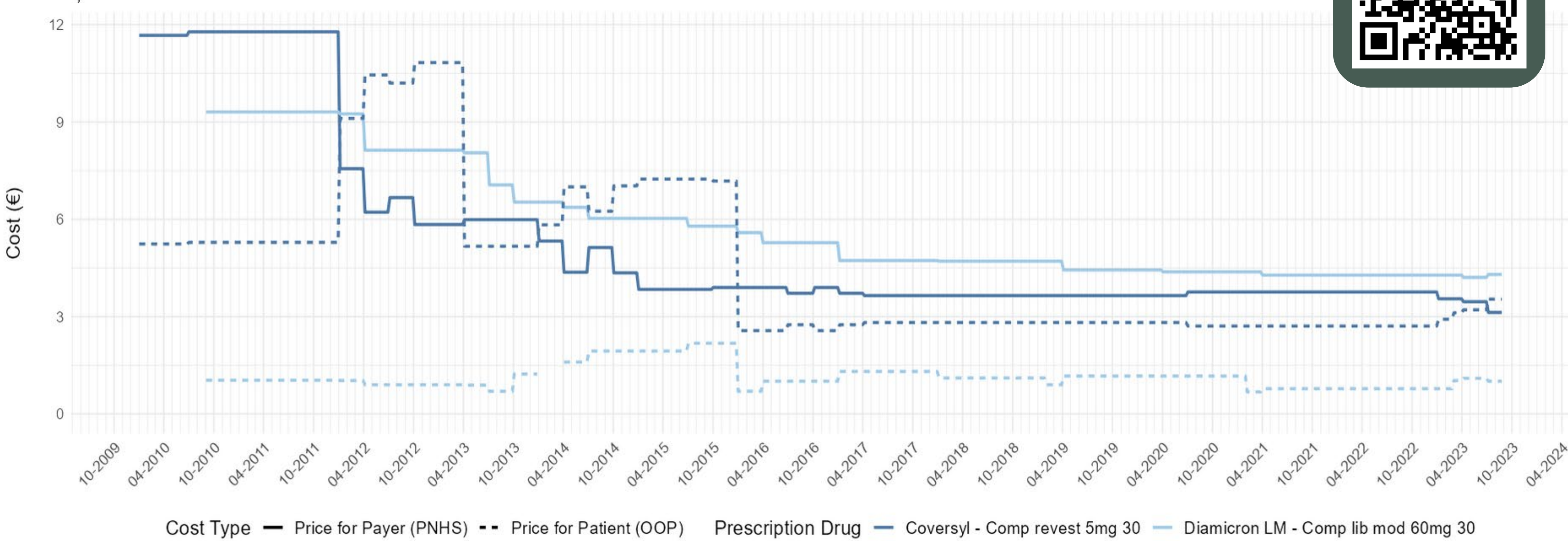


Fig. 3 - Dashboard Sample



## Discussion & Conclusion

- Over time, the price of medicines is expected to decrease due to factors such as loss of patent exclusivity or increased market competition.
- According to reimbursement rules in Portugal, the introduction of newer, cheaper generic drugs lowers the reference value to which the reimbursement percentage is applied.
- The result is an absolute increase of the patient co-payment for the previously sold drugs with a higher price than the one being introduced.
- Consumers must be aware of the cheapest equivalent offerings, as not all generic drugs are equally priced, to get better prices.
- Infarmed’s app “Poupe na Receita” is an effective tool for price monitoring. However, the cheapest version may not be on the market or stocked in many community pharmacies.
- Future analyses should include more drugs and sales data to better quantify avoidable expenditures.