

# Deliverables from 10 years implementation of a National Health Technology Assessment System: Outcomes, Sustainability, Efficiency, Access and Equity

= EXIGO

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## OBJECTIVES

Decisions from National Health Technology Assessment (HTA) Systems can affect virtually all the citizens in the country. The Portuguese national HTA system (SiNATS) was established in 2015. We follow the European Commission recommendations (Figure 1) on evaluating laws, policies and funding programmes to assess the effectiveness of SiNATS in fulfilling expectations and meeting its objectives



Figure 1. EU law, policy or funding programme evaluation

## METHODS

Data was retrieved from public sources, favouring transparency and reproducibility. Effectiveness measures were. Health outcomes: life-expectancy at birth and at 65 years (LY), healthy life years (HLY) and health status Self-assessment. Sustainability: public health and medicines expenditure as a share of GDP. Waste and inefficiency: rate of reimbursement decisions. Innovation adoption: Reimbursement propensity to priority and accelerated medicines and advanced therapy medicinal products (European Medicines Agency definition). Equity of access: Inequality in access within and between pharmacotherapeutic groups of medicines. 5% significance level was adopted

## RESULTS

Population health status increased substantially since 2015: life-expectancy (+0.7 LY), and 65+ (+0.5 LY); +2.6 HLY, +1.8 HLY 65+ (figure 1). People rating their health status as "good" or "very good" increased 15% .

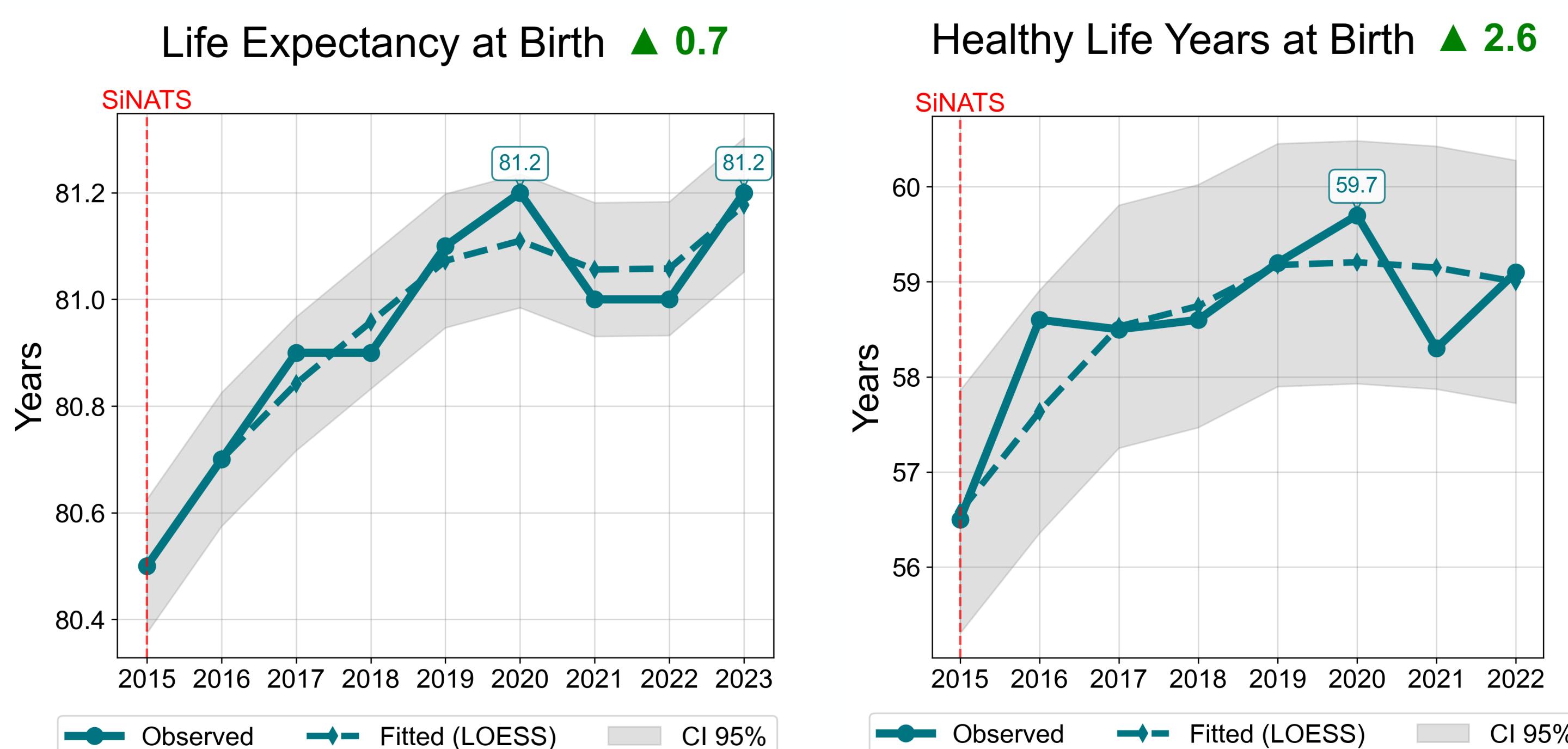


Figure 2. Evolution of population status in Portugal (2015-2023)

From 2015 to 2023 total public expenditure on health remained stable at 6.5% of the GDP. Public expenditure on medicines varied between 19% to 21% of the total public expenditure (Figure 2). SiNATS was 75% efficient in implementing non-reimbursement decisions at public hospitals.

## RESULTS

Innovative medicines were more likely to be reimbursed (odds ratio=1.94, 95%CI: 0.44-8.45), but time-to-reimbursement did not differ from other medicines (hazard ratio=1.1 95%CI: 0.77-1.57).

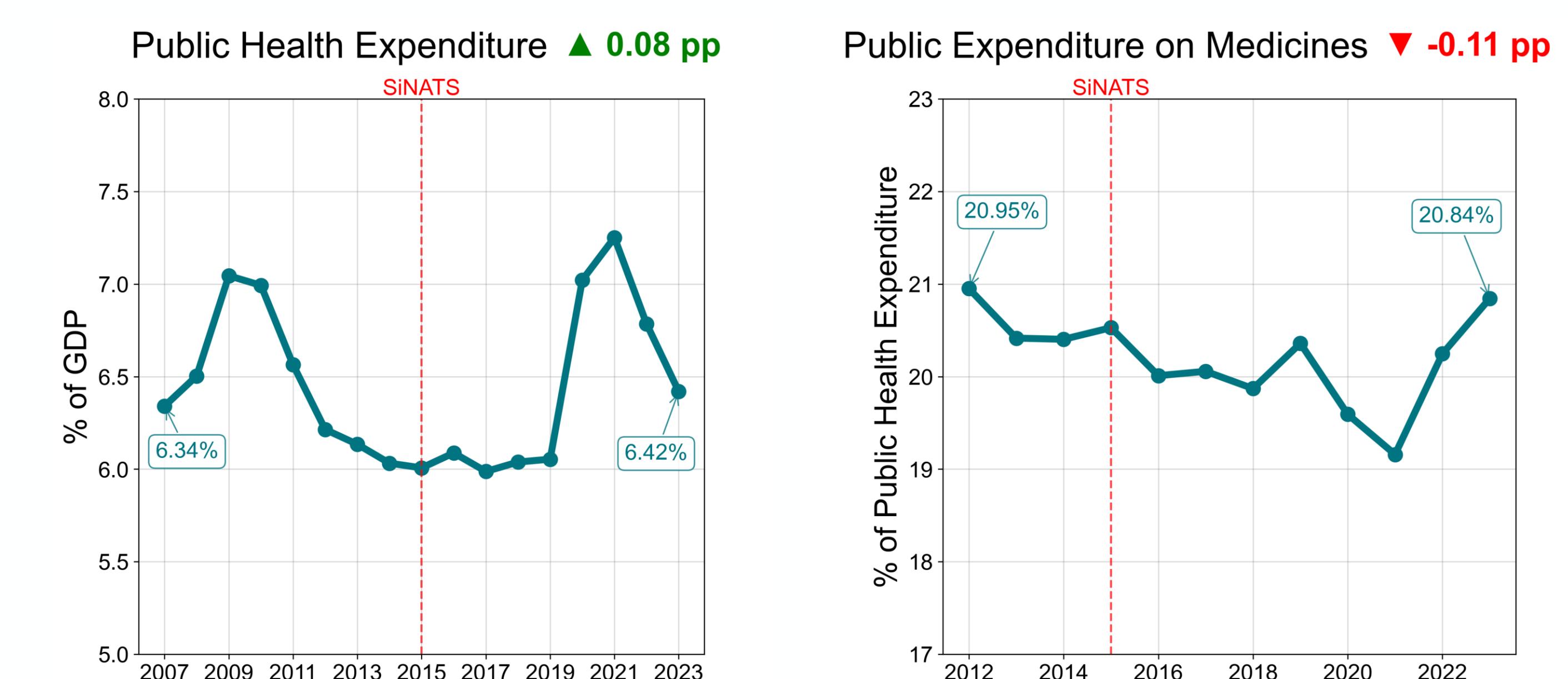


Figure 2. Public expenditure on health and medicines

Gini coefficient estimation revealed 10% reduction in inequality in access to innovative, orphan and oncology medicines from 2020 onwards. Between 2020 and 2025 orphan medicines were the most accessible and oncology medicines the less ones (Figure 3).

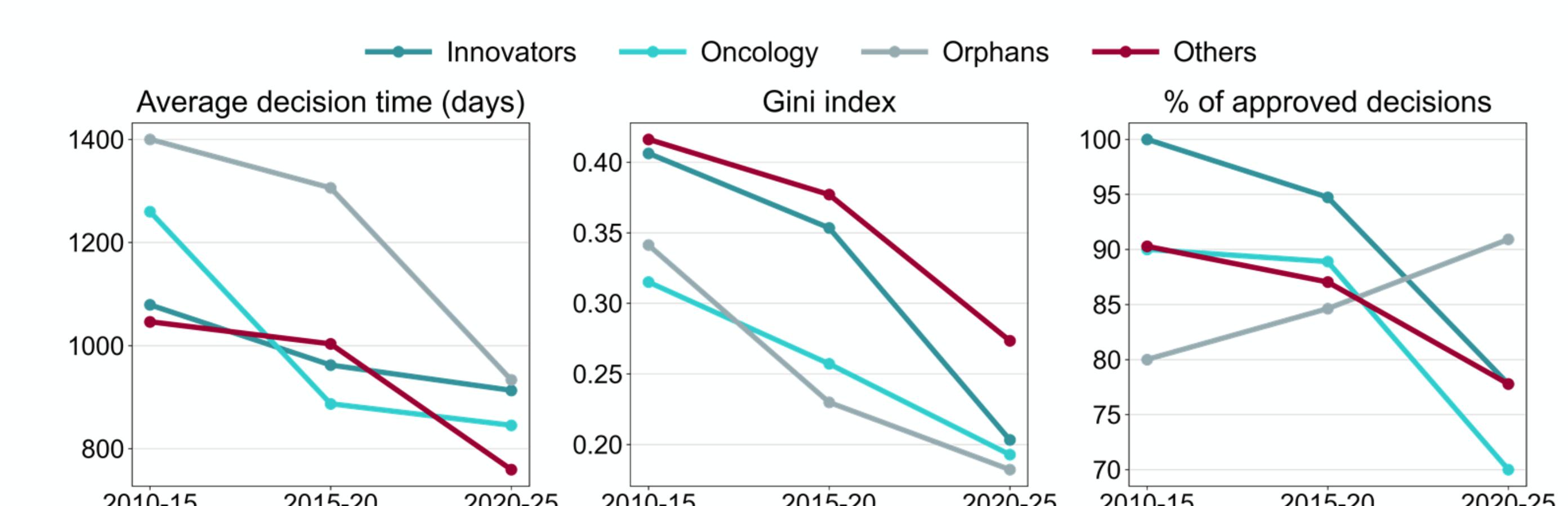


Figure 3. Trends and Gini inequality in time to reimbursement and likelihood of reimbursement of innovative, oncology and orphan medicines

Overall, SiNATS was effective in meeting its objectives. Areas for improvement are real-world effectiveness assessment of medicines, very long HTA timelines and equity in access to innovative medicines (Table 1).

Table 1. SiNATS overall results by outcome domain

Health outcomes	Life Expectancy	HLY65+	QoL	Life Expectancy 65+	HLY
Sustainability	Public expenditure (PE)	PE as share of GDP	PE on medicines	% PE on medicines	
Efficiency	Decisions/CATS				Time to decision/CATS
Monitoring	PE on medicines (€)	Pharmacoepidemiology	Real-world effectiveness		
Waste and inefficiencies	EMA vs INFARMED	Reimbursement	SiNATS vs public purchases		
Promoting and rewarding innovation	Reimbursement of innovative medicines		Time to reimbursement of innovative medicines		
Equity of access	Decision timelines	Gini evolution	Gini distribution	Trends	Distribution reimbursement timelines
					Non-reimbursement rate

Positive (light teal), Positive, but (dark teal), Negative (dark red), Inconclusive (grey)

## CONCLUSIONS

There is evidence favouring the Portuguese National Health Technology Assessment Systems contribution to better population health outcomes, sustainability in public health expenditures and equity of access especially to orphan medicines

