

# THE BUDGET IMPACT OF NICOTINIC SUBSTITUTE REIMBURSEMENT

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## INTRODUCTION

At the end of 2017, the French ministry of health decided to allow the reimbursement of nicotinic substitutes in order to reduce tobacco smoking. Before this decision, patients could only benefit from a fixed €150 per-year reimbursement basis to cover nicotinic substitute expenses (patches and gum).

## OBJECTIVES

The purpose of this study was to evaluate the budget impact of nicotinic substitute reimbursement on the French social security budget. At the moment of the study (September 2017), what forms would be reimbursed (oral, transdermal or both) was still to be decided.

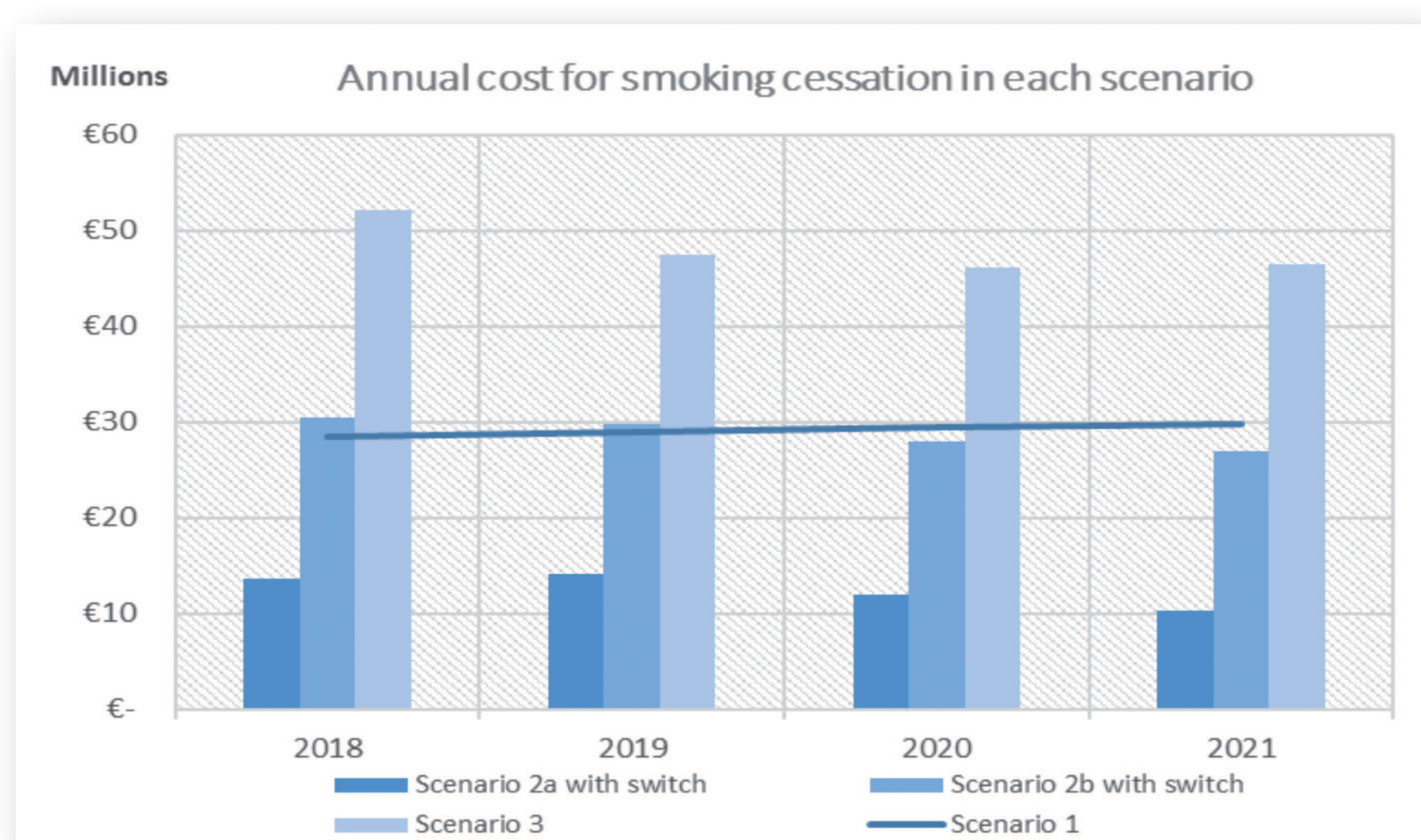
## METHODS

The budget impact analysis was conducted to calculate the financial gap between three scenarios:

- **The first scenario was the situation before the ministry's decision** when patients benefited from €150 per year to cover medicines expenses. We hypothesized a sales growth of 3.90 % in 2018, 1.62 % in 2019, 1.54 % in 2020 and 1.47 % in 2021.
- **The second scenario, in which only one form of nicotinic substitutes** is reimbursed (only patch in scenario 2a, only gum in scenario 2b): based on a Dutch study where nicotinic substitutes were reimbursed in 2011, we forecast an increase of patients number by 21 % the first year, 7 % the second year, then 3 % the third and fourth year. For the non reimbursed form, sales growth was the same as applied in scenario 1. In this scenario, we also hypothesized a switch from the non reimbursed form to the reimbursed form (10 % in 2018, 20 % in 2019, 15 % in 2020 and 5 % in 2021).
- **The third scenario, where all nicotinic substitutes were reimbursed.** Population growth applied was the same as for the reimbursed form in scenario 2.
- In scenario 2 and 3, a **single price cut of 35.8 %** was applied on the nicotinic substitute price, based on the price cut observed for Nicorette Skin (patch).

## RESULTS

For the year 2017, **number of patients who used nicotinic substitutes was 2.2 M** (forecast extrapolated from OFDT report) including 254 726 who benefited from the € 150 per year reimbursement. Number of patients treated with transdermal form was estimated to 925 622 patients and with oral form to 1 278 044 patients.

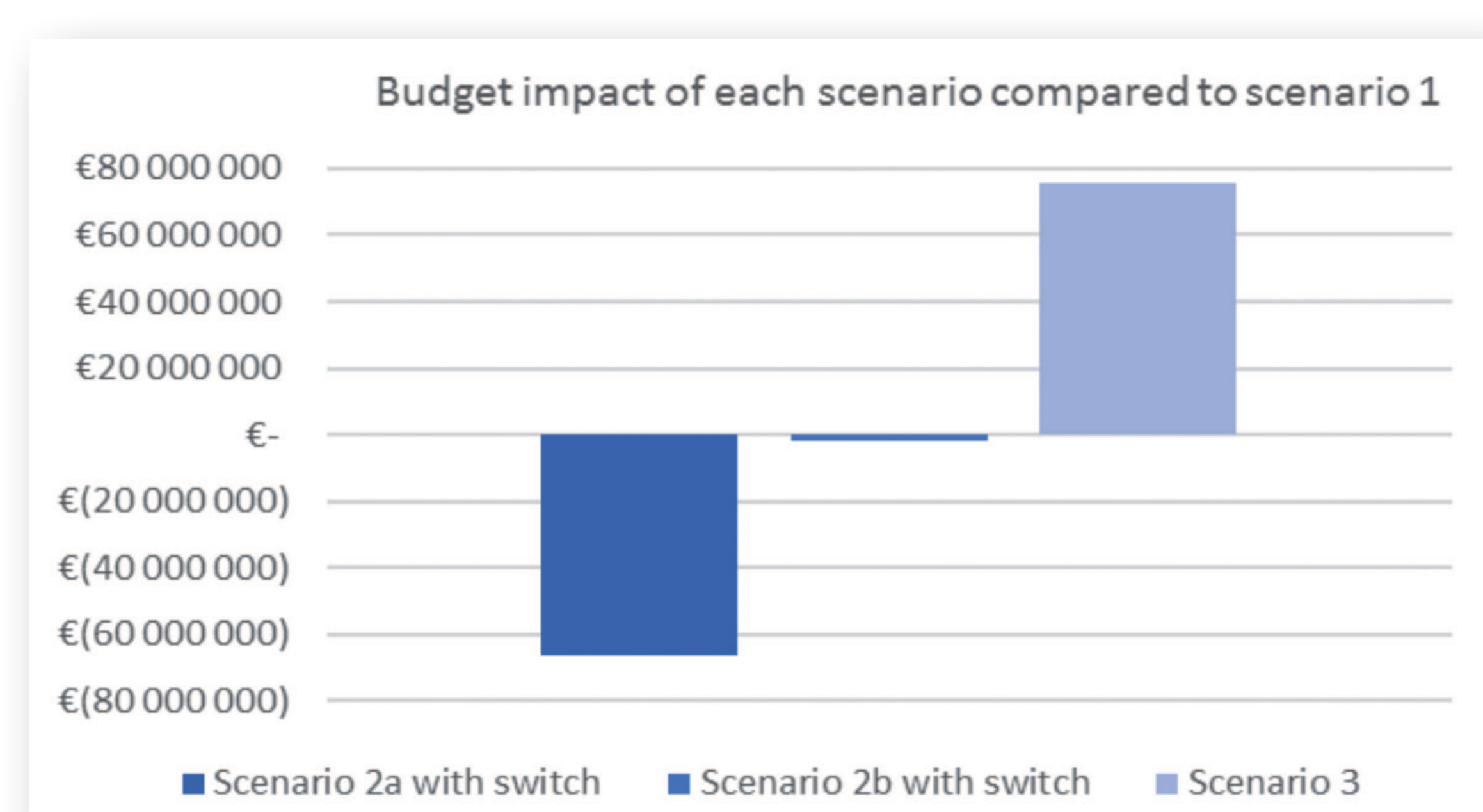


- **The budget impact of scenario 1** for the social security system was estimated around €116.5 M for the period 2018-2021.
- Scenario 2a, where only patches were reimbursed, was the best case scenario. With the hypothesis of a switch from oral to transdermal form, **the French social security would save approximately € 67 M compared to scenario 1**. If there is no switch, this amount increases to € 76 M.
- **Scenario 2b**, where only oral forms were reimbursed, **had a budget impact similar to scenario 1 (around €115 M)** when we considered switch from the transdermal to oral form.
- **Scenario 3**, where all forms were reimbursed, was the worst case scenario, **with a budget impact of €191 M**.

The huge increase of spendings between scenario 3 and scenario 1 is due to the increase of patients who seek treatment reimbursement for smoking cessation: in scenario 1, only 254 000 patients benefit from a € 150 reimbursement while in scenario 3, over 2.6 M patients are reimbursed for nicotinic substitutes they buy and GP consultations for prescription.

The difference between scenario 2a and 2b could be explained by the fact that there are a lot more of patients who chose oral form over transdermal form. Even if gums packages are twice cheaper than patch packages, patients need to use 4 gums to obtain the same nicotine dose than one patch. At similar posology, oral form is twice more expensive than transdermal form.

## CONCLUSION



Allowing the reimbursement of all forms of nicotinic substitutes (oral and transdermal) will **involve a huge increase in spending for the French social security** because the increase of population will not be compensated by price cuts.

In 2018, ministry of health decided to reimburse all forms of nicotinic substitutes. Similar measures in other countries (Netherlands, Quebec), after a couple of years, had a neutral effect on the number of smokers.