

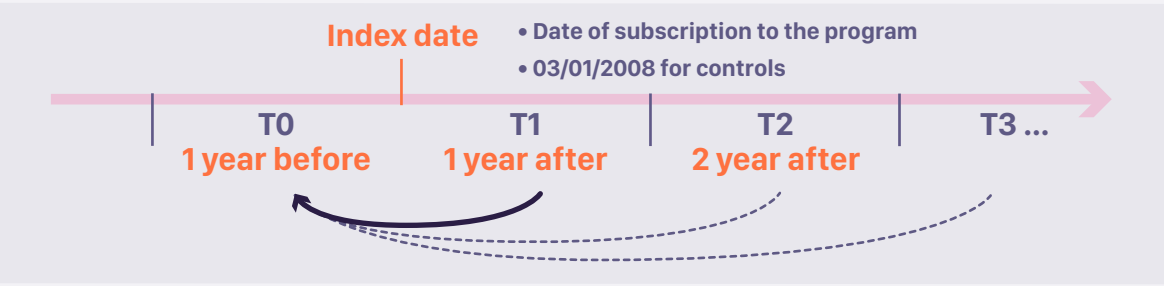
Evaluation of “sophia Diabetes”, a diabetic patient support program, 8 years after its initiation

Background

- *Personalized diabetic patient support program piloted by French National Health Insurance*
- *Launched experimentally in 10 primary health insurance funds in March 2008 and generalized to all of France in 2012-2013*
- *Evaluation performed in 2018 to determine long-term improvement of medical follow-up indicators, impact on morbidity, mortality and healthcare expenditure.*

Methods

- Database: SNDS (Système des Données de Santé) – 2007-2016
- Two samples of patients matched, using propensity score: participating patients in 2008 and controls randomly selected from the SNDS
- Difference in difference (DD) method was applied for comparisons at each year of follow-up (Ti, i=0...8) while controlling for differences between populations



Conclusion

For the first time in France, a disease management program has been evaluated over a long period. Globally, sophia program results in improved patients follow-up, lower increase emergency visits, and a less marked increase of hospitalizations for major cardiovascular events at the end of period.

Results

Follow-up indicators

- **Significant positive impact on recommended follow-up indicators**, right from the first year (positive DD)
- Improvement maintained for most indicators with a **decline**
- But **compliance rates** remained **lower than the national target**, for most indicators

Hospitalization indicators

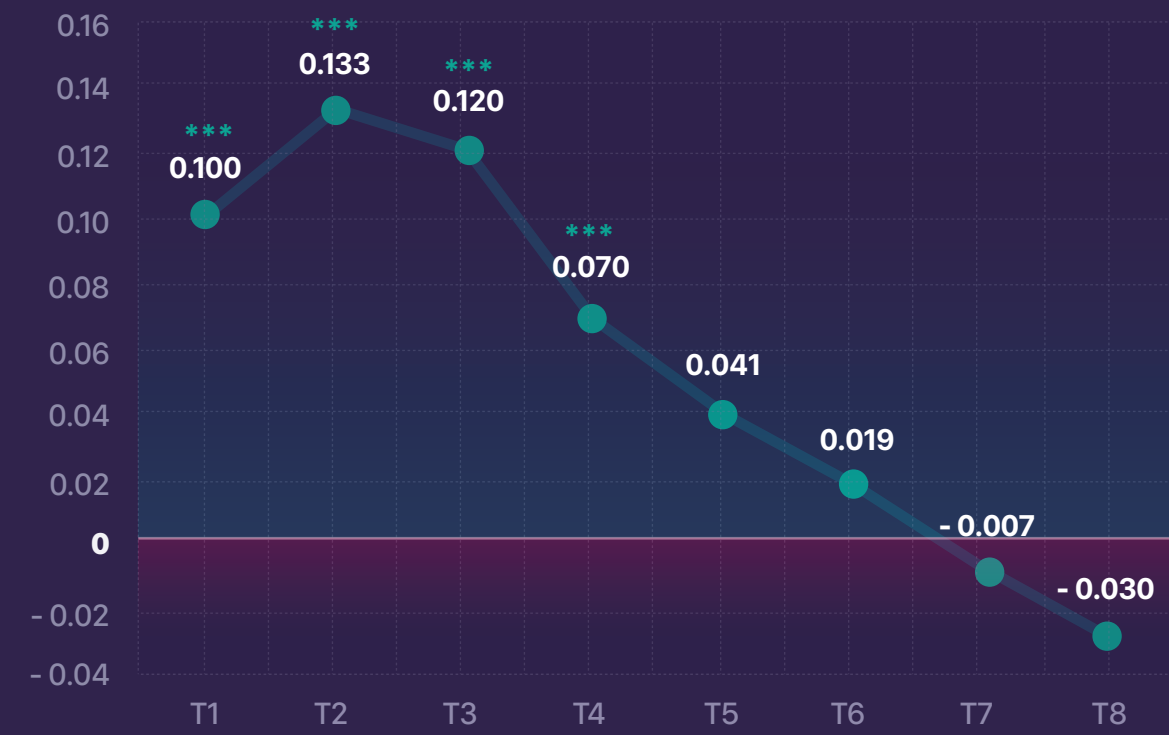
- **No major impact on hospitalization rates** (DD close to 0 and not significant).
- However, **less marked increase of hospitalizations for major cardiovascular events** at T6 and T7 for participating patients
- **A better use of hospital emergency departments was observed for participants.** The DD are negative during all the follow-up and in average

Cost indicators

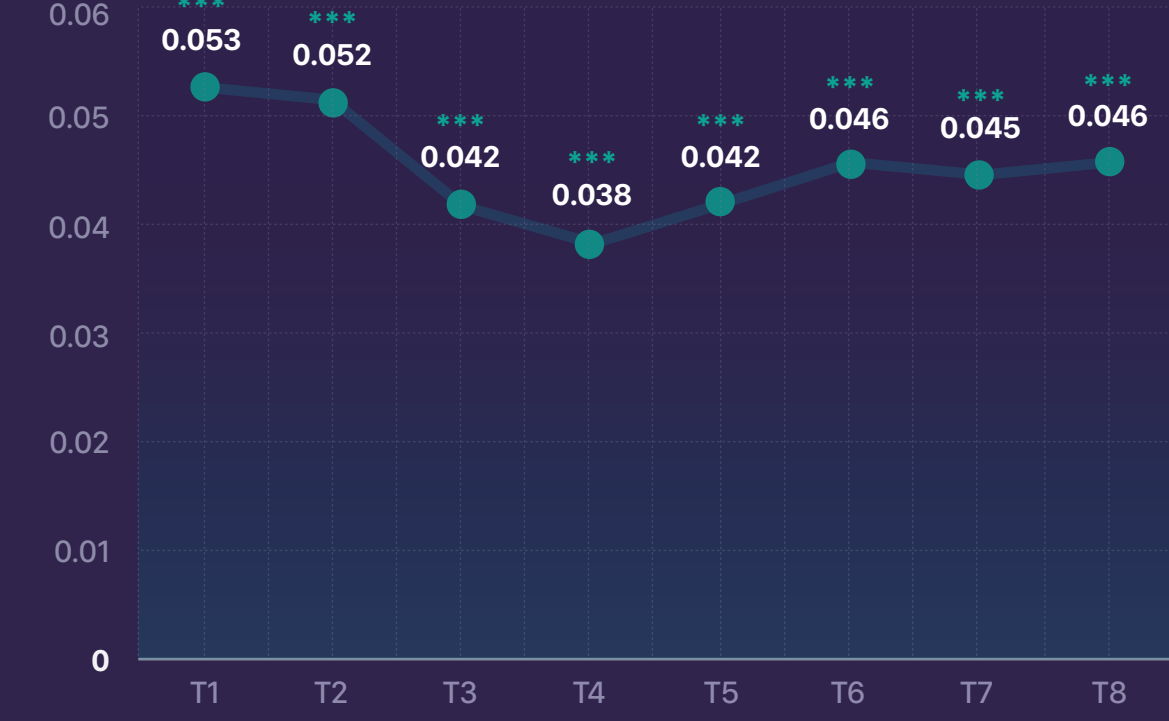
- **Ambulatory care expenditure of participants increased** more markedly between T4 and T7 related to a better follow-up
- **Hospital expenditure increased less markedly during the first year of follow-up and the last 2 years**

*** p-value<0.01 ** p-value<0.05 * p-value<0.1

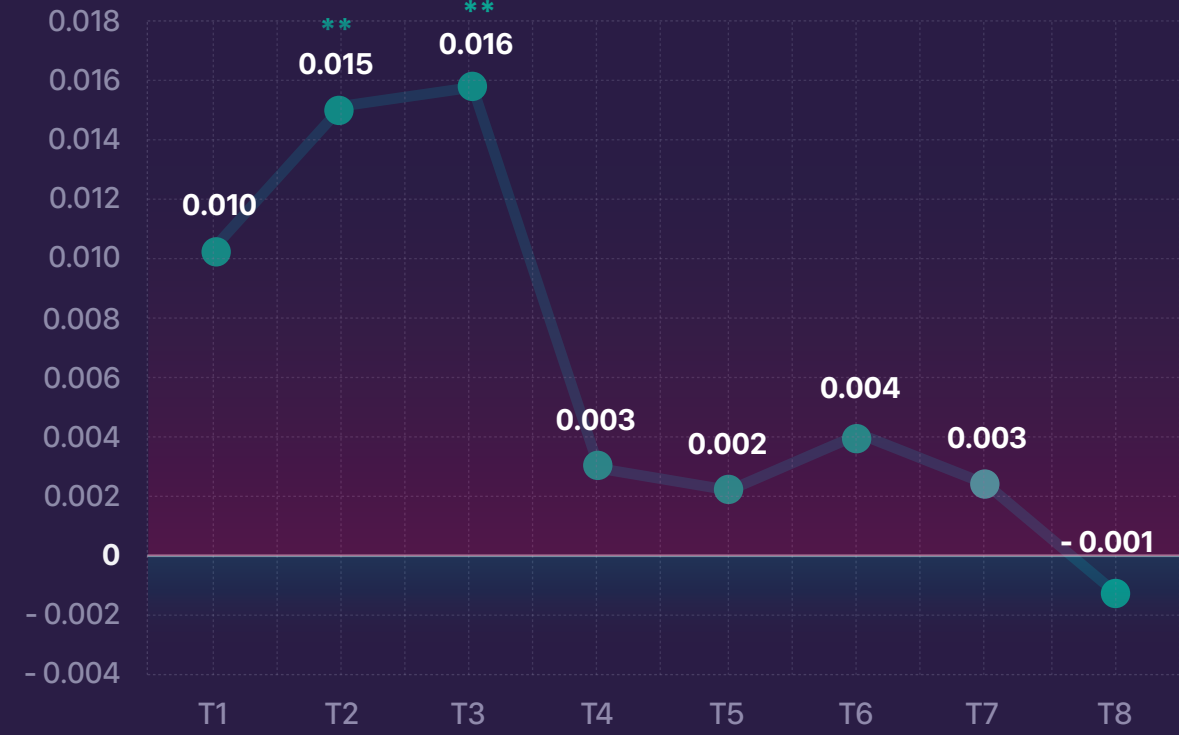
DD of mean number per patient
HbA1c blood test



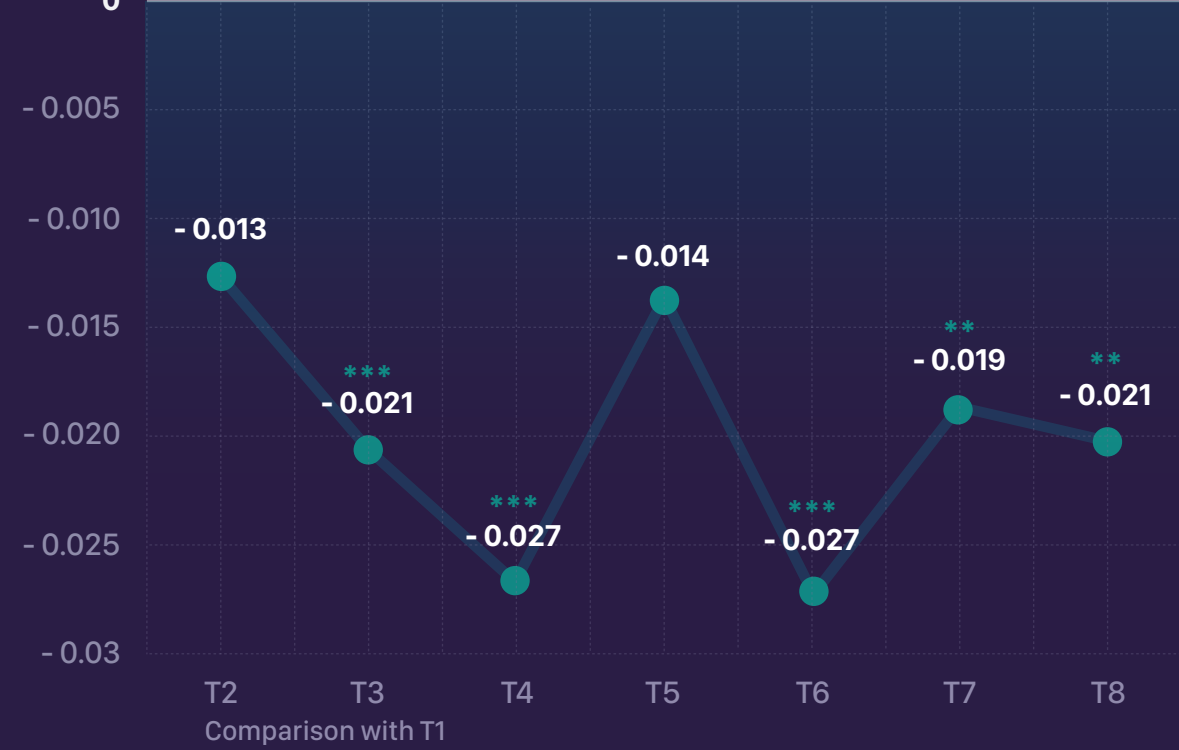
DD of % of patients
Lipidic blood test



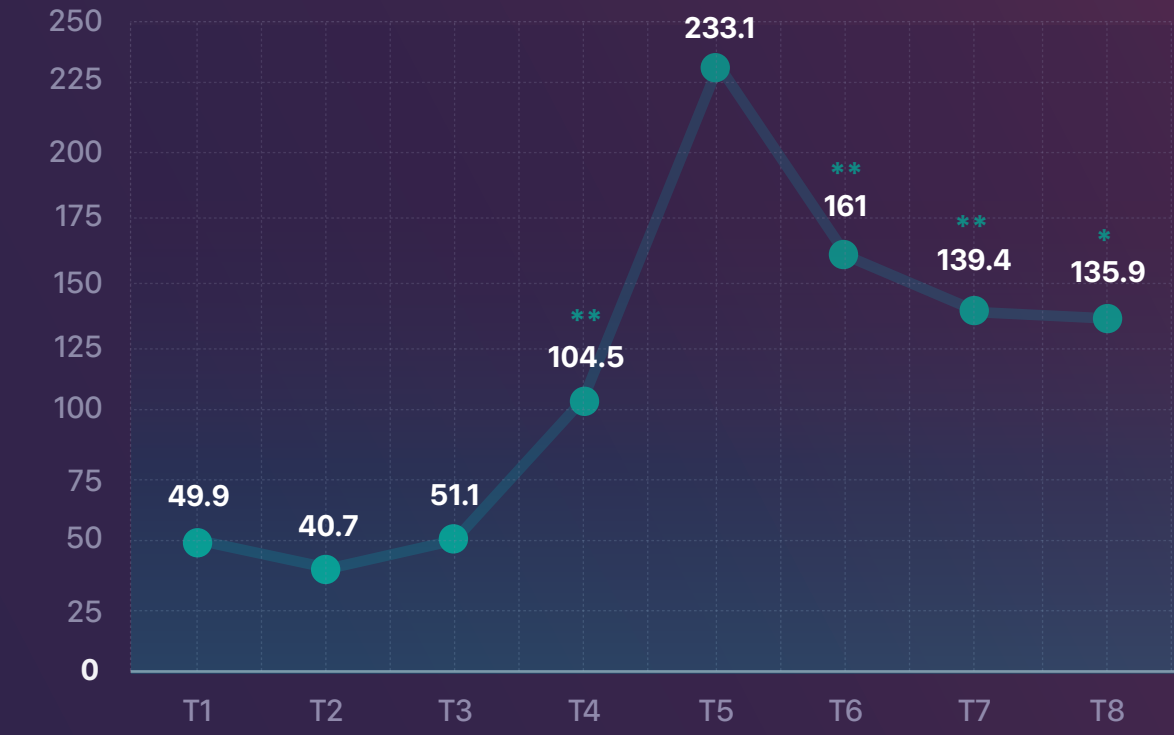
DD of % patients with at least one stay
Hospitalizations



DD of mean number
Emergency department visits



DD of mean cost per patient
Ambulatory care expenditure



DD of mean cost per patient
Hospital expenditure

