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
- 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 (T1, i=0…8).

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.

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.