

Evaluation of the Article51 VIGIE-AGE experiment: a significant impact on hospitalisations resulting in reduced total expenditure

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Acceptance Code : HSD48



CONTEX

Demographic ageing and the epidemiological transition put increasing pressure on the French healthcare system. Staff shortages and fragmented care pathways highlight the need for new solutions to support older people who often require complex care, at home. VIGIE-AGE, through telemonitoring with connected devices, provides an innovative approach to strengthen home care and prevent avoidable hospitalisations.

Key evaluation results are presented below. VIGIE-AGE is an experiment financed by the French health system innovation fund, named Article51.

OBJECTIVES

To assess the effectiveness/efficiency of VIGIE-AGE, a remote monitoring program for people aged 70+ with multiple pathologies and unstable clinical/cognitive conditions that lead to a loss of autonomy. The program enables patients to remain safely at home. An acute care pathway (GAD pathway), as well as a long-term care pathway (AMAD pathway), are offered for patient management.



METHOD

The evaluation was based on clinical data collected during the program between 2022 and 2024, linked to the French national claims database (SNDS). A comparative analysis of healthcare consumption before and during VIGIE-AGE was conducted on "mirror-period" (periods of same duration), aligned with the period observed during AMAD program (monitoring of health parameters at the patient's home, combining the EPOCA telemonitoring platform with a medical team (including a hospital-based geriatrician) and a paramedical team).

RESULTS - FOCUS on AMAD: Chronic Pathway

Reduction in the number of hospitalised patients

- Data from **269 patients** were analysed : mean age 88.1±7,0 years; 65.1% women, follow-up 7.5 months.
- Before AMAD treatment, 81% of patients had been admitted to hospital for an overnight stay, with 62.1% entering via the emergency department. These figures were 45.4% (p<0.0001) and 29% (p<0.0001), respectively, during AMAD (Figure 1).
- Among hospitalised patients, AMAD has no effect on the frequency of stay (5.4 ± 5.2 vs 5.4 ± 4.9 stays/year) or the cumulative annual length of stay (39.9 ± 54.6 vs 39.0 ± 44.5 days) among hospitalised patients.

Reduction in average healthcare expenditure

- Over the period before AMAD, average expenditure was €13,233 (ambulatory care: €3,113 - hospital care: €10,121), while under AMAD it was €10,639 (ambulatory care: €4,957 - hospital care: €5,682) representing a reduction of 19.6% (p=0.0011). Finally, the scheme resulted in a **transfer of costs**: from the hospital (-€4,439, i.e 43.6% reduction) to the city (+€1,844, a 59.2% increase), and to the program (€1,678/patient) (Figure 2).
- With the inclusion of the fixed program costs (€3,198 - €3,530), no significant difference was observed between total expenditures before and during AMAD (€13,233 vs €12,849).

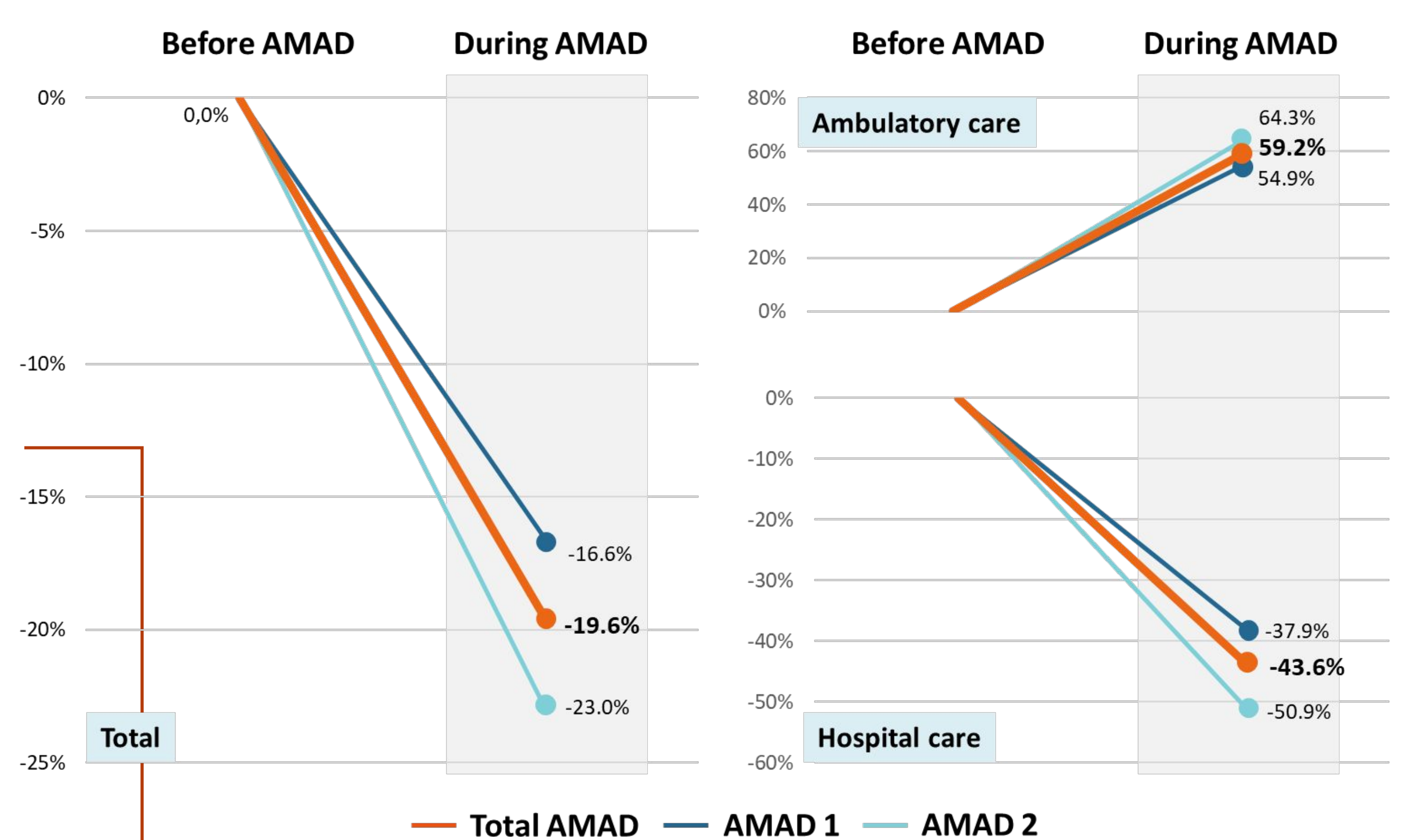
FIGURE 1. Full hospitalisation and emergency department visits before and during AMAD

	before AMAD	during AMAD
At least one overnight stay in Medicine, Surgery or Obstetrics ("MSO")	218 (81%)	122 (45.4%)
		p-value < 0.0001*
Annual number of hospitalisations Mean (SD)	4.4 (5.1)	2.4 (4.2)
Average length of stay in days (calculated over a mean period of 7.5 months), Mean (SD)	6.2 (6.5)	3.3 (5.2)
Cumulative annual length of stay Mean (SD)	32.3 (51.6)	17.7 (35.7)
At least one overnight stay in MSO with entry via the emergency department	167 (62.1%)	78 (29%)
		p-value < 0.0001*
Annual number of hospitalisations Mean (SD)	2.5 (3.4)	1.1 (2.3)

*McNemar's chi-square test

Reduction in the proportion of patients with full MSO hospitalisations and in the rate of emergency department attendances.

FIGURE 2. Evolution of healthcare expenditure before-during AMAD care (without fixed program costs)



*AMAD pathway, divided into AMAD 1 or 2 depending on the intensity of interventions

Reduction in healthcare expenditure during AMAD

Positive patient and carer experiences

9.2/10 Average score / Impact of Vigie-Age on their QUALITY OF LIFE

CONCLUSION

The VIGIE-AGE program, for chronic pathways, significantly reduces overnight hospitalisations, including those via the emergency department, resulting in reduced total expenditure. The cost of services associated with the program (including care-managers) is offset by the resulting reduction in healthcare expenditure. The experiment received (April 2025) a favourable opinion from the health authorities towards generalisation. To be continued...

VIGIE-AGE: an efficient telemonitoring program to support ageing at home and prevent avoidable hospitalisations.

For further information:

Final Evaluation Report: https://sante.gouv.fr/IMG/pdf/vigie_age_rf_250318.pdf

Assessment by the French Technical and Strategic Health Innovation Committees: https://sante.gouv.fr/IMG/pdf/20250412_avis_csis_ctis_aene_-_vigie_agev1.pdf

COI : This study was funded by the French National Health Insurance Fund (CNAM). CEMKA received funding from the Health System Innovation Fund to conduct the evaluation; four of its employees (Stéphane Bouée, Valérie Donio, Camille Nevoret and Laura Bezannier) contributed to this work. Elise Cabanes and Damien Testa represented EPOCA, the project sponsor. Anne-Sophie Aguade contributed on behalf of the Article 51 Evaluation Unit at CNAM, and Annie Fouard on behalf of the French Ministry of Health.

