

HOSPITAL PHARMACY AND MEDICAL DEVICES

ASSESSING ECONOMIC PERFORMANCE UNDER FLAT-RATE REIMBURSEMENT CONSTRAINTS

N. ENNADER¹, O. COLLARD¹, S. TUBEUF², A. VAN EIJGEN¹

¹EUROPE HOSPITALS, PHARMACY, BRUSSELS, BELGIUM. ²UNIVERSITÉ CATHOLIQUE DE LOUVAIN, INSTITUTE OF HEALTH AND SOCIETY IRSS-FACULTY OF PUBLIC HEALTH - INSTITUTE OF ECONOMIC AND SOCIAL RESEARCH IRES- LIDAM, BRUSSELS, BELGIUM

BACKGROUND & IMPORTANCE

In Belgium, the reimbursement of medical and implantable devices relies on fixed lump sums defined by the National Institute for Health and Disability Insurance (INAMI). These amounts are not indexed and do not always reflect patient complexity or technological advances. **Optimizing the use of such reimbursement schemes is crucial for sustainable hospital resource management.**

AIM & OBJECTIVES

This study aimed to assess the impact of a pharmacist-led intervention on the financial performance of vascular surgery procedures. A secondary objective was to identify variables associated with reimbursement deficits.

MATERIAL & METHODS

- **Before-after study** conducted in a **Belgian general hospital** (Europe hospitals)
- December 2023 to April 2025 – **3 phases** :
 - ✓ **Phase I** - Baseline financial analysis
 - ✓ **Phase II** - Pharmacist-led feedback
 - ✓ **Phase III** - Post-intervention evaluation
- **Endovascular dilatation** procedures (INAMI code 589050–589061)
- **Raising awareness among vascular surgeons** :
 - I. Regarding the **cost of medical devices**
 - II. The **reimbursement system**
 - III. Peer **comparison** of margins per intervention
- **Outcomes**
 - ✓ Average financial **margin per procedure** (N)
 - ✓ **Interventions exceeding reimbursement** (%)
 - ✓ **Variables** associated with a **financial deficit**

RESULTS

Among 199 procedures, **193 were included in the final analysis**. Patient and surgery characteristics were comparable between periods. **The average margin increased by €59.7 (+23.3%) (p=0,51), and the proportion of negative-margin procedures declined from 31.7% to 27.2% (p=0,53) though not statistically significant.**

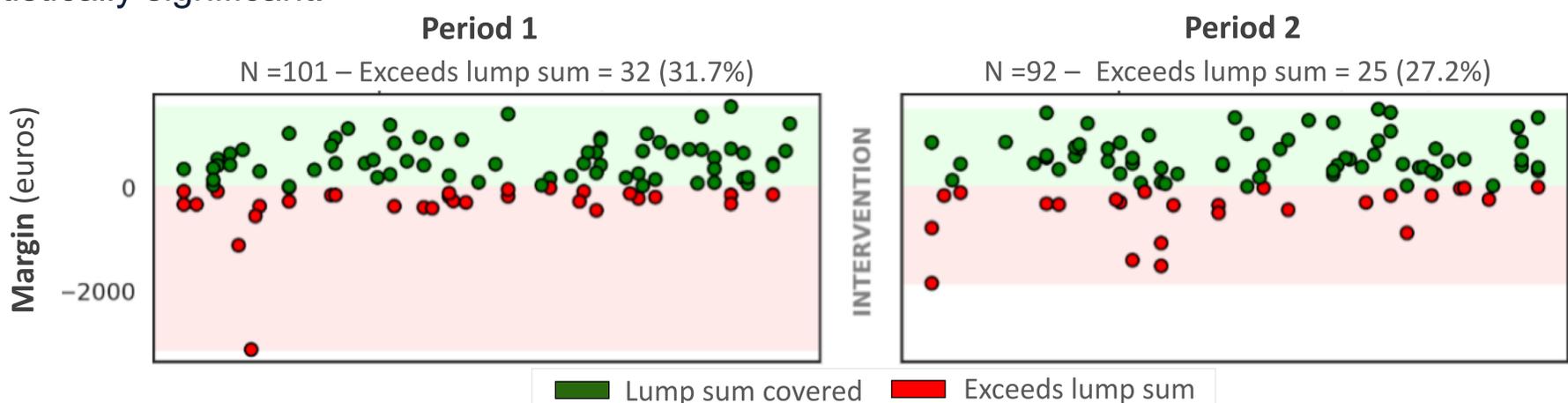


Fig 1. Financial margin per surgical procedure during the pre- and post-procedure periods. Each point represents one procedure. The red points indicate procedures not covered by the flat fee (Fisher's test, $p = 0.53$).

Margins were **negatively associated** with **procedure duration** ($p < 0.001^*$) and number of **comorbidities** ($p = 0.016^*$), but not with age or sex.

CONCLUSION & RELEVANCE

Although statistical significance was not reached, the study revealed encouraging trends. The observed correlation between clinical complexity and lower margins suggests that fixed reimbursement schemes may be inadequate for complex patients. These findings highlight the relevance of hospital pharmacists in promoting cost-awareness and optimizing the use of surgical devices.