

# Relevance of the health insurance databases to study potentially inappropriate prescriptions









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## Conclusion

- A substantial proportion of elderly people receive potentially inappropriate prescriptions;
- Medico-administrative databases can be used to produce indicators of prescription practices to be used to guide public health interventions.

## **Background**

- Potentially inappropriate prescriptions (PIPs) for the elderly: a major issue in the quality of ambulatory care.
- Polymedication is justified to a certain extent by multimorbidity, but significantly increases the risk of adverse events and must be limited.

## **Objective**

 To set up a regional mapping tool giving general practitioners (GPs) access to PIPs' indicators for the elderly in their practice area in order to optimize GPs' prescribing practices for the elderly and to guide public health interventions.

#### **Methods**



 Based on national guidelines, advice of experts in the field and previous works (Reference) conducted by the Southeastern Health Regional Observatory (ORS Paca), calculation of 7 different indicators of potentially inappropriate prescriptions (PIPs) for people aged 65 years or older, using drug reimbursement data from the Health Insurance Fund (PIPs' prevalence calculated among GPs' lists of patients).



Integration of this indicators into a **mapping tool**: the Southeastern Regional Health Information System (SIRSéPACA – www.sirsepaca.org).

## Reference

Jardin M et al. Potentially inappropriate prescriptions for the elderly: A study of health insurance reimbursements in Southeastern France. Revue d'épidémiologie et de Santé Publique. 2012;60:121–30.

### **Results**

- PIPs prevalence differed between drugs type, GPs and territories (Table 1).
- Results allowed to identify the most frequent PIPs in each area for intervention.

Table 1: PIPs prevalence for the elderly in 2017 in southeastern France

PIPs prevalence in 2017	Regional mean	Variation between municipalities
Long-term prescription* of non-steroidal anti- inflammatory (NSAI) drugs	3.2%	0 to 13.6%
Prescription of at least 1 long half-life benzodiazepines	6.8%	0 to 21.6%
Long-term prescription* of benzodiazepines	9.7%	0 to 21.5%
Coprescription** NSAI / angiotensin converting enzyme (ACE) inhibitor or sartan	3.9%	0 to 14.4%
Coprescription** NSAI / vitamin K antagonist (VKA) or new oral anticoagulants	0.2%	0 to 2.3%
Coprescription** antiplatelet therapy / VKA or new oral anticoagulants	1.0%	0 to 3.4%
Prescription of NSAI without the coprescription** of proton pump inhibitors	12.5%	0 to 30.1%

<sup>\*</sup> At least 3 reimbursements on a 4 month period

 $<sup>^{\</sup>star\star}$  Reimbursements of 2 different drugs prescribed at the same date by the same heath professional