

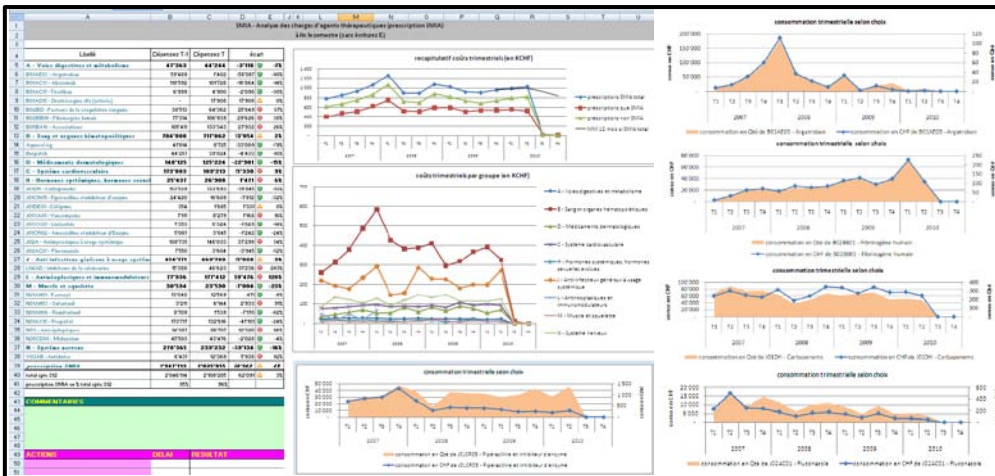
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BACKGROUND

Drugs represent up to 10% of total ICU costs. Cost-containment is a difficult process, due to the large number of prescribers, the complex decision process and the high cost of many drugs used in the ICU. Despite guidelines, the late detection of progressive changes in prescriptions may be responsible for an uncontrolled increase of drug-related costs. We assessed the impact of the introduction of a quarterly internal audit on drug-related costs.

METHODS

Quantities and costs of drugs delivered on a quarterly basis to the adult ICU of our hospital between 2004 and 2009 were extracted from the pharmacy database, by an international five level classification system (ATC code). Within each ATC first level, drugs with either high level of consumption, high costs, or large variations in quantities and costs were singled out and evaluated by a specialized pharmacist, an administrator and two experienced intensivists.



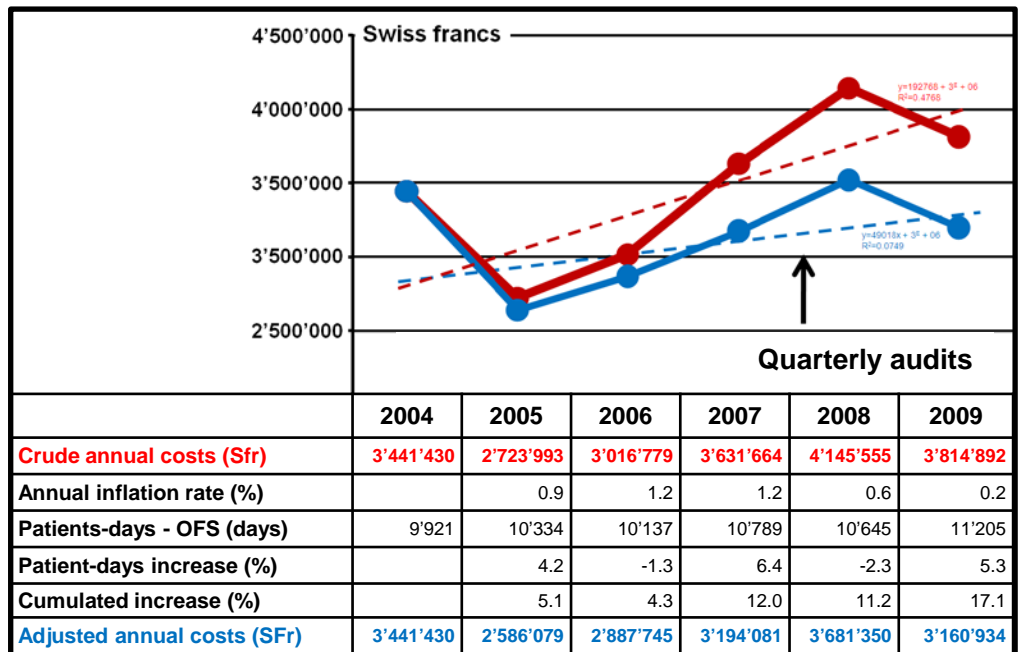
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The internal guidelines were modified accordingly. Costs figures used were drug purchase prices by the hospital pharmacy.

RESULTS

The drug-related costs increased continuously from 2005 to 2008. Following the introduction of our quarterly audits, we observed a stabilisation of the absolute annual drug-related costs in 2009 (Figure).



Moreover, when costs were adapted to the annual increase of activity and inflation, we observed an actual decrease in annual drug-related costs (Table).

CONCLUSION

Five-year increase in quantities and costs of drug prescription in an ICU is a matter of concern. However, confounding factors such as general activity and inflation should be taken into account. Furthermore, our data suggest that implementation of interdisciplinary quarterly internal audits with feedback to prescribers may have contributed to controlling drug-related costs in our adult mixed ICU.