A FIXED BUDGET FOR DRUG EXPENDITURES CAN DECREASE COSTS WHILE IMPROVING QUALITY

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BACKGROUND

In 2006 the system for financing drug consumption in Belgian hospitals changed from a fee-for-service to a prospective budgeting system. Each hospital receives a fixed amount of money per hospital stay to cover the expenditures for refundable medicines. This has stimulated our hospital to rationalise the use of drugs.

OBJECTIVE

To describe initiatives aiming at reducing drug expenditures while maintaining (or improving) quality and implemented from 2010 to 2013 in a 450-bed teaching hospital.

METHOD

- A multidisciplinary group composed of medical/financial directors, physicians, hospital/clinical pharmacists and analysts regularly discuss initiatives for cost-savings.
A part-time clinical pharmacist is responsible for coordination and follow-up.

- The working process has 4 steps:
  - 1° Analysis of deviances in expenditures as compared to other hospitals for certain diseases or classes of drugs
  - 2° Prospective or retrospective audit of prescribing practices to confirm whether there is room for rationalizing the use of drugs
  - 3° Feedback with physicians (and nurses), and decision of actions to be implemented
  - 4° Evaluation of impact on costs and appropriateness of use

RESULTS

**Different types of initiatives have been implemented.
Examples are provided below.**

1. Education of HCPs : educational material was developed and regularly communicated to physicians/nurses; information is also available through the intranet and the computerized prescribing system (Figure 1)

Fig1. Example of educational material for physicians

La forfaitarisation des médicaments,
qu'est-ce que c'est ??

1. Définition

Forfait médicaments = montant que le CHU Mont-Godinne reçoit de l'INAMI lors de l'admission d'un patient (passant au minimum 1 nuit à l'hôpital) pour couvrir **tous les médicaments** remboursables que le patient reçoit durant **toute la durée** de son séjour.

Le montant du forfait est **identique/fixe pour tous les patients d'un même hôpital** (quelle que soient leurs pathologies et co-morbidités), mais est **spécifique à chaque hôpital** (tous les hôpitaux ne reçoivent pas le même montant par admission). Ce montant est calculé **1x/an** sur base de l'activité de l'hôpital **3 ans auparavant** et des moyennes de dépenses par pathologies **au niveau national**.

A titre d'exemple, le forfait par admission au CHU Mont-Godinne (période 07/2012 à 07/2013) est de
→ cette somme sert donc à couvrir tous les médicaments remboursés qu'un patient reçoit durant son séjour, que celui-ci dure 2 ou 15 jours. Si la dépense en médicaments est plus importante que le montant alloué, la différence est à charge de l'institution.

Que pouvez-VOUS faire EN PRATIQUE ?

Prescrire les traitements les moins coûteux à efficacité et sécurité égales

Optimiser les durées de certains traitements : éviter, par exemple, de prescrire des antibiotiques de manière prolongée (thérapie ou prophylaxie)

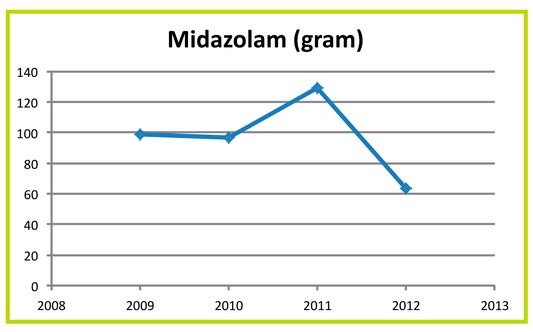
AB	Prix unitaire	Prix journalier	Coût 7 jours de traitement	Coût 10 jours de traitement
Augmentin IV 2g	3,11 €	9,33 €	65,31 € (40% du forfait)	93,30 € (58% du forfait)
Tazocin IV 4g	12,12 €	48,48 €	339,36 € (~ 2x le forfait)	484,80 € (3x le forfait)

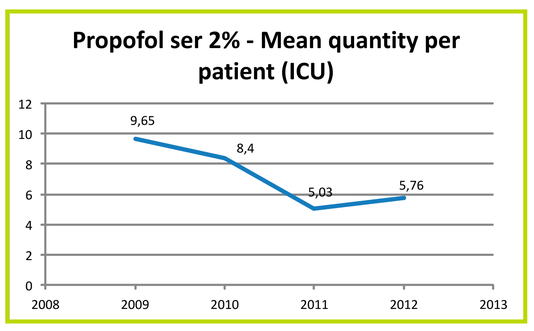
+ ajout : coût diluant/perfusion (dans le forfait)/matériel, temps infirmier…

2 Initiatives focusing on specific (classes of) drugs :

- Use of anesthetic agents : (a) sedation practices in ICU were modified to encourage the use of midazolam instead of propofol in specific cases (Figure 2); (b) pre-filled syringes of propofol used during surgery were replaced by vials. Annual costs were reduced by approximately 80.000€
- Procedures for using albumin and colloids were reviewed; the consumption of albumin fell by 80% over 3 months, without significant increase in the use of cristalloids or synthetic colloids.

Fig2. Evolution in the consumption of midazolam and propofol after modifications in practices





3. Initiatives focusing on specific wards : audit and feedback of prescribing practices were performed by a clinical pharmacist on pneumology and otorhinolaryngology wards.

Table1. Description of audit and feedback performed on 2 acute wards.

ENT surgery	Pneumology
-Why? Deviant in MDC « ear-nose-throat » + too long hospital stays	**- Why?** Deviant in the management of simple pneumonia
-How? Prospective observation by a clinical pharmacist during 4 weeks	**- How?** Prospective observation by a clinical pharmacist during 7 weeks
-Main issues Antibioprophylaxis duration; Quality problems	**- Main issues** Antibiotherapy duration; Iv : oral switch; Quality problems
-Decisions/actions None	**- Decisions/actions** Shorten duration, specifically in nosocomial pneumonia

4. Initiatives focusing on medication-use processes : intravenous to oral switch is audited at least once yearly for all inpatients and results shared with physicians and nurses (Figure 4). Interactive discussions occur on wards with poor performance.
The proportion of appropriate IV prescriptions has improved over time (Figure 3).

Fig3. Appropriateness of iv prescriptions over time

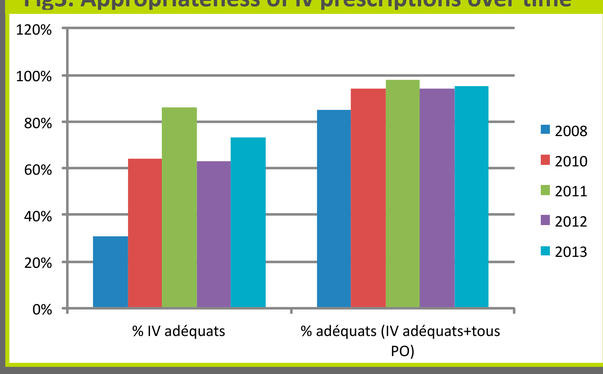
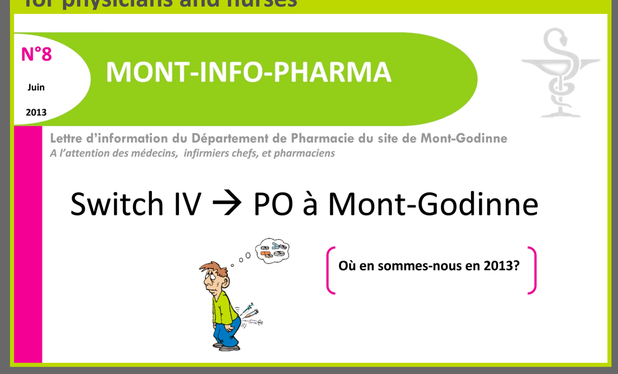


Fig 4. Feedback of results (partim) for physicians and nurses



CONCLUSION

Significant cost savings were achieved, even though some initiatives were unsuccessful and measurement of impact is sometimes challenging. Success requires a structured approach and multidisciplinary collaboration, and involvement of clinical pharmacists is undoubtedly valuable. With the continuous decline of the national budget, further initiatives will have to be implemented.