CONTINUING EVALUATION AND IMPROVEMENT OF ACTIVITIES OF CLINICAL PHARMACISTS FOR OLDER INPATIENTS

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INTRODUCTION

Controlled studies have shown that collaboration with clinical pharmacists (CP) for frail older patients can improve the quality of prescribing and patient care (1, 2). Sparse data however describe how to evaluate CP activities with the aim to improve their performance.
At our 428-bed teaching hospital, a clinical pharmacy service has been developed over the last 4 years. Among 5 CP, one is dedicated to the acute geriatric unit (ACE 27 beds).
The objective is to summarize the indicators used to evaluate clinical pharmacists' activities, and to illustrate their use with the data collected in 2010-2011 relative to the activity at ACE.

METHOD

The data collected encompass:

Measures of activity

a) Time spent on clinical activities on the ward vs. other duties (data collected 4 weeks/year)

b) Number and percentage of patients admitted on the unit and cared for by the clinical pharmacist (automated measures)

c) Number and characteristics of interventions performed by the clinical pharmacist (data collected 4 weeks/year)

d) Number of educational presentations (yearly measure)

Performance measures

e) Rate of acceptance of interventions (data collected 4 weeks/year)

f) Satisfaction of doctors and nurses (hospital-wide survey in 2011) and suggestions for the future

RESULTS

From 05/2010 to 04/2011, the results relative to clinical pharmacy on the geriatric unit, and the decisions taken in consequence to these, include the following:

a) **60%** of time spent on clinical activities (Table1) vs **40%** on other activities with not direct impact on patients (meetings, student supervision…); we now aim for a maximum of **30%** for the latter. The data also showed that attending medical rounds was time consuming and not efficient. Giving up this activity enabled the pharmacist to do more medication reviews and discharge planning.

b) The pharmacist took care of **379** patients in one year, representing **87%** of patients admitted on the unit.

c) Average of **45** interventions per week with two frequent issues: overuse and underuse (Table 2).

d) In 2010, the pharmacist performed **7** educational presentations. Three of them were dealing with optimization of prescriptions in older people; others related to the management of heart failure, drug interactions in cancer patients and intravenous to oral switch.

a) **92%** of interventions were accepted (**83%** fully, **9%** partially)

f) Overall satisfaction of doctors and nurses: excellent (median at **5/5)**; suggestions for improvement allowed the pharmacist to better organize her activities (e.g optimisation of moment to perform interventions and discharge form)

Table 1. Clinical activities

Activity	Average time spent per patient (minutes)
Medication history (data-gathering, notification in medical record and opinion)	42
First analysis of medical record and treatment	21
Treatment follow-up during hospital stay (analysis of blood tests, clinical results and prescription changes)	9
Discharge management (medication reconciliation and information to the patient and/or family and general practitioner)	59

Table 2. Most frequent problems leading to CP intervention

Most frequent problems (frequency)	Interventions
Treatment needed, not-prescribed (34%)	Starting treatment
No valid indication or duration too long (22%)	Stopping treatment
Inadequate dosage (13%)	Decreasing or increasing dose
Adverse drug event or drug interaction (7%)	Stopping treatement, decreasing dose or changing drug
Inadequate monitoring (6%)	Optimizing follow-up care
Inadequate formulation or route of administration (4%)	Changing formulation or route
Inadequate time of administration (4%)	Changing time

CONCLUSION

Several indicators are being used to evaluate clinical pharmacy activities. Their application is not too time-consuming and has proved to be highly valuable to (1) quantify activities, acceptance and satisfaction, (2) identify ways for improving efficiency.

References :

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