

Prescription and administration of medicine in a surgical department

Clinical pharmacists increase the safety of medical treatment of surgical patients

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Background

General Surgeons did not focus sufficiently on the medical treatment of their patients...!

This conclusion can be drawn, following an internal survey, on the way prescription and administrations of medicine were handled in Department of Surgery, Randers Regional Hospital.

The surgeons faced a big challenge in order to pass the standards, set by the Danish Healthcare Quality Programme (DDKM) and thereby ensure accreditation. Therefore, collaboration between the clinical pharmacists and the Department of surgical was initiated.

Objectives

The purpose is:

- to ensure accreditation by the DDKM by performing medication-related interventions.
- to gather information and experience from the concept of having a clinical pharmacist in a surgical department.

The 3 requisites for medication set by DDKM include:
1: preparation and registration of the medical history
2: medication reconciliation
3: allergy registration

Methods

The clinical pharmacist worked at the surgical ward, 2 hours a day (mon-fri) from February to end of June 2011. DDKM external survey was conducted early June 2011.

Using the patients' electronic health records the clinical pharmacist reviewed the prescribed medicine of the admitted patients and made comments about the results of the medication review.

In the period before accreditation the main focus was accreditation. Then, in June 2011, the main focus was pharmacologic aspects.

The interventions were implemented by:

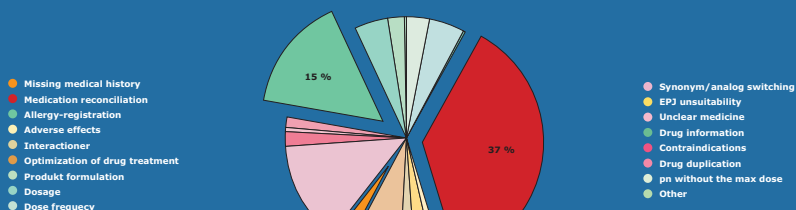
- Teaching the staff about the elements of the accreditation process and the requisites for medication.
- Weekly presentation of interim results for the individual requisites.
- Presentation of the final results at staff-meetings.

Results

In the intervention period 672 patients out of 815 admitted patients (82 %) were enrolled in the study.

This resulted in 1685 interventions for 415 patients (= 4,1 interventions pr patient).

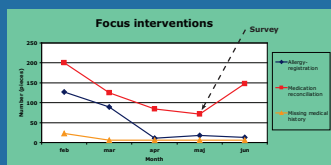
The identified drug-related interventions were distributed into 17 categories.



What was the results according to interventions about the 3 requisites for medication?

Intervention type	Number	% of all interventions
Preparation and registration of the medical history	47	3%
Medication reconciliation	628	37%
Allergy registration	258	15%

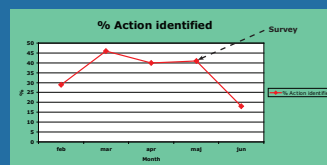
What was the development of the focus interventions?



The number of comments related to the 3 requisites for medication decreased substantially and to a very low level during the study period.

However the number of comments related to medication reconciliation quickly returned to the pre-intervention level when the focus was removed from the area.

Did the surgeons respond to the pharmacists suggestions?



Action identified in chart reports increased during the focus period, thereafter decreasing.

The surgeons accepted the interventions from the pharmacists in an increasing rate during the period.

Recommendations for the future:

- It is recommended that the department:
- 1) ensures that frequent attention to the focus area will be maintained.
 - 2) ensures that surgeons remain aware of the requisites for medication and knowledge of their own role in them.
 - 3) delegate the following to a clinical pharmacist:
 - Preparation and registration of medication history and medication reconciliation (outpatient clinic and ward)
 - Reviewing the medication when patients are hospitalized
 - discharge-counseling

Conclusions

- The Department of Surgery passed the standards set by the Danish Healthcare Quality Programme (DDKM).
- The clinical pharmacist can, through education of the staff, various tools, intense focus and dialogue, guide surgeons to better focus on medicine prescription and thereby ensure accreditation according to DDKM.
- By a proactive attitude the clinical pharmacist may contribute to increased patient safety.

Tool