Patients discharged from hospital with optimal medication due to pharmaceutical interventions

W.B. Hansen & T.H. Duedahl. Hospital Pharmacy at Lillebaelt Hospital, Vejle, Denmark.

PURPOSE
To ensure rational pharmacotherapy and accurate medication status at hospital discharge, a clinical pharmacist supports the medical staff by conducting medication review and improves transfer of relevant discharge information to primary care.

RESULTS
From February to December 2012, a total of 401 patients were included and subsequently 365 medical reviews (with a total of 4222 medicines) conducted by the clinical pharmacist.

The median number of medicines prescribed was 11 (range 6-29). The median age of the patients was 77 years (range 29-98).

In 264 of the 365 conducted medical reviews (72%), the clinical pharmacist identified 569 drug related problems which led to clinical interventions suggested to the physician.

Top-3 of the 569 clinical interventions:
1. Duration of medical treatment (26 %)
2. Inappropriate dosing (17 %)
3. Supplemental medicine treatment (14 %)

The clinical interventions were most frequently related to medicines from ATC-group N (26 %) and ATC-group A (15 %), reflecting the portion of the medicines used on the ward.

88 % of the interventions were accepted by the physician and 75 % led to medical changes prior to discharge.

In spite of this, the clinical pharmacist still revealed inconsistency of the discharge information in the medication status e.g. due to intricacies of the electronic patient records or lack of rationale for medical changes. This was observed for a third of all patients upon discharge.

ACKNOWLEDGEMENTS
The study was financially supported by “Sygehusapotekernes og Amgros forsknings- og udviklingspulje” and “Udviklingsrådet Lillebaelt Hospital”.

BACKGROUND
Medication errors are common when transferring medication records between health care professionals in secondary and primary care. This can lead to suboptimal pharmacotherapy and decreased quality of health care. At our hospital pharmaceutical medication review has been successfully implemented at hospital admission to the acute ward to ensure rational pharmacotherapy.

CONCLUSION
Our results indicate that pharmaceutical intervention contributes to optimal medication. Furthermore, constantly focusing on accurate information and rationale for medical changes in the discharge plan was found to be crucial.

This on-going quality initiative including clinical pharmacy can ensure use of rational pharmacotherapy and thereby increase the quality of health care.

Fig. 1: Flowchart of included patients and acceptance of suggestions