Effect of clinical pharmacist? s interventions during a patient? s path through the hospital on the pattern of drug-related problems at discharge ? a study design

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Background Patients discharged from the hospital have a high risk for drug-related problems at discharge, such as potential drug-drug interaction or unclear therapy duration. In Swiss community pharmacies, DRPs were found in up to 54.7% of prescriptions after discharge.

Purpose The aim of the study is to analyze the pattern of drug-related problems documented by pharmacists in a regional hospital at discharge. Further, we will analyze the effect of A) a medication reconciliation conducted at hospital admission and B) interprofessional word rounds including a clinical pharmacist on the pattern of drug-related problems (DRPs) at discharge.

Method All patients discharged from the medical ward that had filled their prescription in the hospital-integrated community pharmacy and received a discharge counselling from June 2016 to May 2018 will be included in this retrospective data analysis. In order to evaluate the impact of clinical pharmacist? s interventions (medication reconciliation (MedRec) at hospital admission and/or clinical pharmacist-assisted ward rounds) on the pattern of DRPs at discharge, four different patient groups will be compared: A) Patient with comprehensive pharmaceutical care (MedRec at hospital admission, clinical pharmacist-assisted ward rounds) B) MedRec at admission C) Clinical pharmacist-assisted ward rounds D) Standard care (without MedRec at admission and without clinical pharmacist-assisted ward rounds) All four patient groups received at least the discharge counselling in the hospital-integrated community pharmacy where DRPs are systematically documented by clinical pharmacists.

Findings Outcomes will be the frequency and pattern of DRPs of the four patient groups A-D, as well as ATC codes of corresponding medication and patient? s characteristics.

Conclusion The insight gained from this retrospective data analysis may be used as a basis to develop best practice standards for addressing DRPs during a patient? s path through the hospital and hereby improving patient safety at home.