

# 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 ward 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.