Background At present, there is no profound knowledge available on the effects of medication reviews on the incidence of drug-related problems in community pharmacies in daily routine and their value in Germany. A nationwide structured medication review is not yet implemented and only a few associations offer advanced training programs to acquire the necessary skills. One of these training programs, the Apo-AMTS project, was introduced in Westphalia-Lippe in 2012. Aim of the Apo-AMTS project is to identify, reduce, and prevent drug-related problems in patients with polymedication, and to establish a structured medication management in community pharmacies as inherent part of pharmaceutical services.

Purpose Aim of this Study is to evaluate how the medication management service affects the quality of the medication.

Method During an observational study within a period of 12 months, 120 pharmacies in Westphalia-Lippe will perform medication reviews for 1000 patients taking five or more drugs. The procedure comprises of two meetings between the pharmacist and the patient, a structured patient interview, a detailed check of the entire medication including OTC drugs and dietary supplements, and the preparation of a medication plan. This medication plan will be re-evaluated and updated after three months. The outcome of the pharmaceutical intervention will be evaluated by using the MAI score, the MRCI (Medication Regime Complexity Index) score, and the reduction of drug-related problems including its nature and the following intervention.

Findings While preparing the study, a revised and validated documentation sheet was implemented. The experience-based modification allows a more complete and reproducible documentation and closes the gap from a single medication review to ongoing medication management. The document is used as a guide to conduct structured medication reviews. The observational study started in October 2016. First results are expected in summer 2017.

Conclusion Medication management is a feasible approach in the German pharmacy setting and has the potential to improve the quality of drug therapy in patients with polypharmacy.