

Table 1 Components of TOP intervention

Brief name	What?	Why?	How?	Who?	Where?	When and how much?
Electronically available treatment-relevant information at hospital admission	Anamnesis support on admission	Recognising inadequate outpatient pretherapy, avoiding errors in anamnesis	Making treatment-relevant information electronically available from health insurance data	Pharmacist (ward pharmacist or hospital pharmacist)	Access by computer using the TOP software in all parts of the participating hospital admitting patients (accident & emergency services, wards, pharmacy)	Once, when patient is admitted to hospital
MTM at hospital admission	Structured medication review on admission	Recognising prescription errors, correctly interpreting adverse drug reactions, reduction of prescription cascades, avoidance of treatment errors due to missing information	Electronically supported MTM review with subsequent recommendation for correcting inadequate medication therapy, medication reconciliation (between patient self-reports and health insurance data), documentation and communication of possible or necessary adjustments of medication	Pharmacist (ward pharmacist or hospital pharmacist), physician in patient`s department	Access by computer using the TOP software in all parts of the participating hospital admitting patients (accident & emergency services, wards, pharmacy) Communication of adjustments to medication therapy through hospital information systems, by email or phone	Once, when patient is admitted to hospital

MTM during hospital stay	Co-care of high-risk patients during their hospital stay	Improving MTM in the hospital, reducing mortality and complications in the hospital, avoidance of treatment errors	Electronically supported MTM review for inpatient medication therapy of high-risk patients	Pharmacist (ward pharmacist or hospital pharmacist)	By computer using the TOP software	Daily during patient`s hospital stay
MTM at discharge from hospital	Medication checking and recommendation of medication therapy at discharge	Reducing medication errors	Electronically supported MTM review with subsequent recommendation for correcting inadequate medication therapy, documentation and communication of possible or necessary adjustments to medication, comparison of the final therapy recommendation to previous medication	Pharmacist (ward pharmacist or hospital pharmacist), physician in patient`s department	By computer using the TOP software Communication of adjustments to medication therapy through hospital information systems, by email or phone	Once before patient is discharged

Medication information of patients at discharge from hospital	Patient empowerment at discharge	Informing the patient about medication after discharge to improve health literacy, autonomy and adherence, reducing application errors	Pharmaceutical discharge interview (face-to-face) including information about BMP (printed handout of medication therapy), information regarding supplemental self-medication, therapy supporting notes via app	Pharmacist (ward pharmacist or hospital pharmacist)	The interview takes place in the patient's room or in a room of the department or pharmacy	Once before patient is discharged
MTM-coordination at discharge from hospital	Cross-sectoral coordination at discharge	Reducing medication errors and avoiding information breaches between sectors, avoidance of treatment errors due to insufficient cross-sectoral coordination	Coordination of changes to therapy with the general practitioner who continues treatment	Pharmacist (ward pharmacist or hospital pharmacist), general practitioner	Communication of adjustments to medication therapy through information systems, by email or phone	If necessary, once before patient is discharged

MTM: medication therapy management