Development of Quality-Indicators for Medication Reviews Type 2a

Isabel Waltering, Sophie Scheppe, Verena Kurth, Ulrich Jaehde, Georg Hempel

**Background** A guideline how to conduct medication reviews type 2a was developed in 2014, several other manuals were also published. Guidelines do not automatically lead to a high quality-level of performance. Quality-indicators can contribute to a measurable quality of medication reviews.

**Purpose** We aimed to identify quality-indicators for medication reviews (MRs) type 2a. These indicators should be used to ensure a structured execution of these reviews and to guarantee high quality outcomes. These indicators should also be used for external assessment of the quality of this service.

**Method** A systematic literature review was conducted to identify quality-indicators already existing for medication reviews in community pharmacies, additional indicators deviated from the german guideline for medication reviews were also identified. This preliminary indicator-set was discussed by experts and modified afterwards. With a group of experts consisting of healthcare experts and pharmacists conducting MRs a two-step Delphi-survey was performed. The definition of the indicators followed the RUMBA-rules. These rules define criteria for the revision of standards. A five-point Likert scale was used for the assessment of the indicators. An indicator was incorporated in the final set when all five criteria of the RUMBA-rules (relevant, understandable, measurable, behavioral, attainable) for each indicator reached 70% consensus by the experts.

**Findings** 350 indicators were identified through literature review, 23 were relevant for community pharmacies, transferable to the German system and appropriate for the quality assessment of MRs. After discussion by the first expert-group twelve indicators were accepted for the preliminary indicator-set for the Delphi-survey, including six structure-, three process-, and three outcome-indicators. The Delphi-survey was conducted with 20 experts (pharmacists performing MRs [50%], community pharmacists not performing MRs [15%], pharmacists not working in community pharmacy [20%] and healthcare experts [15%]). After the second Delphi round consensus could be reached for six indicators. These indicators include three structure-indicators: - A documentation system is available to document patient data, actual medication and detected medication related problems - A SOP or quality-management guideline how to conduct a MR is existing - The pharmacist has an additional qualification for MRs The following process-indicator was included: - All 13 domains for medication related problems according to the German guideline were checked Outcome-indicators were defined as: - Appointment for discussion of MR-results is offered to the patient - The final and complete medication-list is handed over to the patient

**Conclusion** We were able to develop a set of six indicators that is potentially appropriate to measure quality of MRs type 2a. In a next steps this set needs to be tested for practicability and validity.