

# Quality standards for safe medication in nursing homes: Development through a multi-step approach including a Delphi consensus study

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## Abstract

**Objectives:** The aim of the study was to develop quality standards reflecting minimal requirements for safe medication processes in nursing homes.

**Design:** In a first step, relevant key topics for safe medication processes were deduced from a systematic search for similar guidelines, prior work and discussions with experts. In a second step, the essential requirements for each key topic were specified and substantiated with a literature-based rationale. Subsequently, the requirements were evaluated with a piloted, two-round Delphi study.

**Setting:** Nursing homes in Switzerland.

**Participants:** Interprofessional panel of 25 experts from science and practice.

**Primary and secondary outcome measures:** Each requirement was rated for its relevance for a safer and resident-oriented medication on a 9-point Likert-Scale based on the RAND/UCLA-Method. The requirements were considered relevant if, in the second round, the median relevance rating was  $\geq 7$  and the proportion of ratings  $\geq 7$  was  $\geq 80\%$ .

**Results:** Five key topics with a total of 87 requirements were elaborated and rated in the Delphi study. After the second round (response rate in both rounds 100%), 85 requirements fulfilled the predefined criteria and were therefore included in the final set of quality standards. The five key topics are: I: "The medication is reviewed regularly and in defined situations", II: "The medication is reviewed in a structured manner", III: "The medication is monitored in a structured manner", IV: "All health care professionals are committed to an optimal interprofessional collaboration", V: "Residents are actively involved in medication process".

**Conclusions:** We developed normative quality standards for a safer and resident-oriented medication in Swiss nursing homes. Altogether, 85 requirements define the medication processes and the behaviour of health care professionals. A rigorous implementation may support nursing homes in taking a step towards safer and resident-oriented medication.

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