

# Patients' and providers' perspective on medication relatedness and potential preventability of hospital readmissions within 30 days of discharge

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**Background** Hospital readmission rates are internationally used as a quality indicator. A systematic review shows that a median of 21% of readmissions are due to medication and a median of 69% were deemed preventable based on healthcare provider perspective. However, the opinion of patients was not included while medication related problems occur frequently after discharge, for example due to side effects or difficulty to implement the hospital's medication changes in daily life.

**Purpose** The aim of this study is to compare the patients' perspective on the medication relatedness and potential preventability of their readmissions with the providers' perspective.

**Method** This study was performed at the OLVG hospital in Amsterdam, from July 2016-May 2017. Patients (>18 years) with a 30-day unplanned readmission after discharge from the department of internal medicine, pulmonology, cardiology, gastroenterology, surgery, neurology or psychiatry were interviewed during their readmission (or their caregiver in case of e.g. a language barrier). Among others the following information was gathered using semi-structured questions: patients' opinion regarding medication relatedness and potential preventability, and who could have potentially prevented the readmission (hospital, general practitioner, family, patient himself or other). Healthcare providers (residents of the participating departments and a pharmacist) reviewed files of these readmitted patients to assess medication relatedness and preventability. Patients' and providers' perspectives were compared descriptively.

**Findings** Two-hundred-twenty-three complete interviews were collected: 197 with patients and 26 with a caregiver. According to patients 49 of 223 (22%) readmissions were medication related and of these, 26 (53%) readmissions were potentially preventable. Patients reported 22 times that actions in the hospital could have prevented the readmissions, 2 times actions from the general practitioner, 1 time actions from the patient himself and in 3 times it was unclassifiable. According to providers' perspective 41 (18%) readmissions were medication related and of these, 14 (34%) readmissions were potentially preventable. In 16 of the 223 (7%) readmissions patients and providers agreed on the medication relatedness of the readmission, and of these, in 3 (19%) agreement on the potential preventability existed.

**Conclusion** Patients' and providers' perspective on medication relatedness and potential preventability of hospital readmissions differ. According to patients medication related readmissions are more often potentially preventable compared with providers' perspective.