

Which part of unplanned hospital readmissions within 30 days after discharge is medication related?

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Background Hospital readmissions pose a major burden on patients and healthcare systems but little is known about drug-related hospital readmissions.

Purpose Primary aim: to identify the percentage and preventability of unplanned hospital readmissions >30 days of discharge due to medication related problems. Secondary aims: to assess which types of medication were responsible for potentially preventable readmissions and potential causes of these readmissions.

Method A cross-sectional observational study was performed. Patients (>18 years) with a 30-day unplanned hospital admission after discharge from the department of internal medicine, pulmonology, cardiology, gastroenterology, surgery, neurology or psychiatry were included. Residents of these departments and a pharmacist reviewed files of readmitted patients. During multidisciplinary meetings potentially preventable cases were discussed and consensus was reached. Percentage of readmissions that were medication related, and potential preventability were assessed. For potentially preventable readmissions types of medication responsible for the readmission and potential causes were assessed. Potential causes were categorized into three categories: problems due to transitions in care, prescribing and adherence.

Findings 426 readmissions were included. Nineteen percent was medication related and 38% was potentially preventable. Most common types of medication responsible for potentially preventable readmissions were: diuretics (20%), drugs used in diabetes (17%) and cardiac therapy/beta blocking agents (13%). Potential causes of these readmissions were problems due to prescribing (43%), adherence (33%) and transitions in care (23%).

Conclusion Nineteen percent of the hospital readmissions is medication related and 38% of these readmissions is potentially preventable. Problems with transitions in care, prescribing and adherence might be good starting points for implementing interventions to reduce medication related hospital readmissions.