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Medication safety during transition from hospital to home care – a pilot study

Background

The current literature indicates that up to 54% of patients are affected by medication errors during transition from hospital to ambulatory care. The transfer process is complex, involving different providers and therefore fraught with communication-related challenges. While patients 65 years and older are specifically at risk of experiencing drug related problems, little is known about medication safety during transition of care to the home care setting of this specific patient population.

Objectives

The aim of this pilot study in the scope of a master's thesis was to generate systematic medication safety data at the interface of inpatient to home care, analysing the quality of the drug therapy itself and the transfer process with a focus on geriatric patients.

Methods

A systematic medication analysis (Type 2b) was executed including all patients 65 years and older and with five or more discharge medications, transferred from hospital to home care from March,1 until April, 15 2016 (6 weeks). Model organizations were the Cantonal Hospital of Lucerne, Switzerland (860 beds, 48'900 discharges/year) and the home care organisation Spitex Stadt Luzern (1'300 admissions/year).

The current process was captured with a structured data collection sheet, completed by the Spitex staff. Discrepancies were identified by systematically comparing the current to the agreed-upon process.

Results

Of 39 patients transferred from hospital to home care during the specified timeframe, 19 patients met inclusion criteria for this pilot study. Patients' ages ranged from 65 to 87 years, with an average of 75.1 ± 7.4 years. Patients were prescribed from 5 to 19 drugs on their discharge medication list (average: 8.4 ± 3.8 drugs).

The discharge medication lists of the patients showed several potential errors: The most common drug related problems were missing or wrong information about dose (84.2%) and drug formulation (84.2%), potential interactions (73.3%) and prescribed drugs without discernible indications (68.4%). The major discrepancy of the current transition process was the transfer of the discharge documents from hospital to home care: at least one required document was missing in 77% of transition.

Conclusion

This pilot study showed several medication safety aspects during transition from hospital to home care needing improvement. With an expected shift from inpatient to ambulatory care and the future demographic development, solid medication safety data from the home care setting is crucial for subsequently improving patient safety.