From Hospital to Domiciliary Hospitalization: a Pharmacist Intervention

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Background In November 2015 a new model of hospitalization was created in Portugal, entitled domiciliary hospitalization unit (DHU). This model emerges as a possible solution to the A&E excessive use, prevailing in Portugal.

Purpose This study aims to evaluate the existence of pharmacotherapeutic errors during patient transition across the health care system. It also aims to integrate a pharmacist into this multidisciplinary team, who can through medication reconciliation detect and solve these errors.

Method A mixed model was used, where an observational retrospective design explored medication discrepancies prior to DHU and an intervention prospective design was found most suitable to readily act upon discrepancies found during DHU. Medical and therapeutic history were obtained through the hospital pharmacy database; current medication information was checked and completed by open observation at the patient’s home. The data here presented are from patients hospitalized between August and September of 2016. All patients transferred from the hospital to the DHU were included in the study. Patients without outpatient medication and those receiving the pharmaceutical visit only during the first day of DHU hospitalization were subsequently excluded. Medication review and reconciliation were made between the outpatient medication and the DHU medication and/or with the hospital service prior to DHU. At the time of medical discharge, therapeutic guides were performed. Data was analysed using Statistical Package for the Social Sciences (SPSS) v.24.0. Descriptive and bivariate analysis have been used (Spearman correlation coefficient to explore associations between days of hospitalization and number of medication discrepancies).

Findings Of the 20 admitted patients, 70% were males and 30% females, most of whom were 85 years old or more (85%). They were hospitalized in DHU an average of 11.15 days. Patients had on average 9,2±3,9 outpatient medications, of which 3,8±1,97 were omitted and 1,05±1,27 had wrong taking indications. The three drugs classes most omitted were antihypertensive drugs (23,38%), oral antidiabetics (18,18%) and psychoactive drugs (14,29%). The number of missing drugs was not influenced by the number of days the patient remains in the service prior to reconciliation (rs = -0,134; p = 0,572). Many patients had the home medication poorly stored (45%) and expired (15%).

Conclusion Patient’s safety was the main focus of the pharmaceutical intervention, though which all medications omissions and incorrect doses were detected and rectified. Pharmaceutical interventions also emphasized storage of medication, identification and collection of expired drugs, and further enhanced adherence to prescribed treatment. This abstract is ongoing work.