Concilia Medicamentos pilot study: analysis of discrepancies

Luis Amaro Cendon, Francisco Farfán Sedano, Miguel Ángel Calleja Hernández, Fernando Martínez Martínez, Elena Valles Martín, Ana Molinero Crespo

Background Medication discrepancies are common at hospital discharge and medication reconciliation is widely endorsed as a preventive strategy. The General Pharmaceutical Council of Spain, the Pharmaceutical Care Forum in Community Pharmacy (Foro AF FC), the Spanish Society of Hospital Pharmacy and the University of Salamanca have worked on a Medication Reconciliation Service to ensure continuity among transitions of care. They had the collaboration of Laboratorios Cinfa.

Purpose The aim of this study was analyzing the discrepancies and reconciliation errors detected in ?Concilia Medicamentos? pilot study. A discrepancy is any difference aroused between the usual medication previously taken by the patient and the medication prescribed after a care transition (definitions agreed by Foro AF FC).

Method A prospective, no control group, non-randomised and multi-center observational study was carried out between July and October 2016, among different healthcare pharmacists levels in Asturias, Granada and Salamanca. The study protocol was approved by Medicines Research Ethics. Discrepancies were identified and classified using an agreed taxonomy. A computer application, located in NODOFARMA, was developed for the data registration and communication between different care levels. Statistical analysis of data was performed using IBM SPSS Statistics 23.0.

Findings Discrepancies were identified in 88% of the 120 patients. Out of the 336 discrepancies found, 76% were considered justified and 24% required clarification by the prescribing doctor. The most frequent discrepancies were: medication initiation (40%), medication omission (29%) and changes in dosage, posology or route of administration (14%). 97% of the medication initiation discrepancies were justified. 47% of omissions and 37% of changes in dosage needed clarification. When they were clarified, 6.5% of discrepancies were not justified and were considered reconciliation errors of which medication omission (n=9) was the most frequent, with two cases of medicines with withdrawal syndrome. Among the different dosage, posology or route of administration (n=5) and incomplete prescription (n=4) were found High-Risk Chronic Drugs or medicines that need a high control of the dosage regime. While the number of medicines increased, the discrepancies requiring clarification increased significantly (p<0.005) and also the reconciliation errors (p<0.01). The high number of unresolved discrepancies at the end of the study suggests the existence of a number of errors greater than registered.

Conclusion Discrepancies and reconciliation errors have been detected and solved like other published studies. In all cases, pharmacist intervention avoided possible harm to the patient. The coordinated action of pharmacists from different care levels in this Service allowed to improve the patient care.