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Reconciliation Errors at Hospital Discharge in Spain: Development of a Predictive Model

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***SUMMARY*. The aim of this study is to analyze reconciliation errors (REs) in patients discharged from a cardio-pneumology unit,and to develop a predictive model of REs. A cross-sectional study was performed in a General Hospital. The frequency of REs was determined by comparing the discharge treatment with home medication, and any discrepancies were assessed with the physician. The association between REs and possible predictors was measured by simple logistic regression.A multivariate logistic regression was performed to predict REs. The optimal cut-off point was determined from a ROC curve. 88.9% of the 216 patients included had a RE, 35.5% of which were clinically relevant. Most of REs were incomplete prescription (40.6%) and omission (48.9%). Polypharmacy at admission, discharge report signed by a specialist physician and emergency admission were associated with REs (Hosmer-Lemeshow = 0.636; p = 0.888, Nagelkerke R^2 = 0.439). 0.855 was chosen as the optimal cut-off point, which correctly classified 86.1% of patients (sensitivity = 86.5%, specificity = 83.3%).The predictive model developed is useful for the prioritization of patients with high risk of RE at hospital discharge in this unit.**

RESUMEN. El objetivo de este estudio es analizar los errores de conciliación (EC) en los pacientes dados de alta de una unidad de cardio-neumología y desarrollar un modelo predictivo de EC. Para ello se llevó a cabo un estudio transversal en un Hospital General. Los EC se determinaron comparando el tratamiento de alta con la medicación en casa, y las discrepancias fueron evaluadas con los médicos. La asociación entre EC y posibles predictores se midió mediante regresión logística simple y para predecir los EC se utilizó una regresión logística multivariante. El punto de corte óptimo se determinó a partir de una curva ROC. El 88,9% de los 216 pacientes incluidos tenían EC, de los cuales un 35,5% eran clínicamente relevantes. La mayoría de EC fueron prescripción incompleta (40,6%) y omisión (48,9%). La polifarmacia al ingreso, el informe de alta firmada por un médico especialista y la admisión de emergencia se asociaron con EC (Hosmer-Lemeshow = 0,636, P = 0,888, Nagelkerke R^2 = 0.439). El punto de corte óptimo elegido fue 0.855, que clasificó correctamente al 86,1% de los pacientes (sensibilidad = 86,5%, especificidad = 83,3%). El modelo predictivo desarrollado es útil para la priorización de pacientes con alto riesgo de EC al obtener el alta en esta unidad hospitalaria.

KEY WORDS: cardio-pneumology, medication errors, medication reconciliation, patient discharge, predictive model.

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