pharmacist led medication review during hospital admission. The model was easily implemented, low resource and resulted in a significantly reduced number of potentially inappropriate medications.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-375 EXCESSIVE POLYPHARMACY AND OTHER DETERMINANTS FOR UNPLANNED HOSPITAL ADMISSIONS

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Background and importance Unwanted polypharmacy has been associated with avoidable harm (eg, unplanned hospital admissions (UHAs)), especially in older adults. Clinical pharmacy interventions have been developed to reduce UHAs. Yet it remains unclear which population derives the largest benefit of such interventions.

Aim and objectives The aim of this study was to identify determinants for UHAs in community dwelling adults.

Material and methods A retrospective study was performed, using data from a linked database consisting of the Integrated Computerised Network and the InterMutualistic Agency database. Patients aged 40 years or older with data available for the years 2013–2015 were included. Patients who died or were admitted to a nursing home were excluded. An index date was defined as the last general practitioner (GP) contact in 2014. The preceding 12 months were used to collect the determinants. For the occurrence of a UHA, a period of 12 months after the index date was used. To select determinants for inclusion in the multivariable model (table 1), a univariate logistic regression model was fitted on each predictor with the outcome UHA as the response. Systolic blood pressure, alanine

aminotransferase and potassium were non-significant at the level of 0.2 and hence were excluded from the multivariable model.

Results 40 411 patients were included in the project and 2126 (5.26%) patients had at least one UHA. Mean age was 58.3 ($\pm$ 12.3) years. Results of the multivariable logistic regression model are summarised in table 1.

Conclusion and relevance The model identified seven determinants as associated with UHA: excessive polypharmacy, male gender, number of comorbidities, older age, low haemoglobin level and prior hospital and GP visits.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Conflict of interest No conflict of interest

4CPS-376 ANTIRETROVIRAL THERAPY OPTIMISATION STRATEGIES IN PATIENTS INFECTED WITH HUMAN IMMUNODEFICIENCY VIRUS: A DECISIVE TASK FOR HOSPITAL PHARMACISTS

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Background and importance Antiretroviral therapy (ART) for human immunodeficiency virus (HIV) cause a significant economic impact on health systems worldwide. Guidelines and treatments are constantly renewing, and for this reason it is crucial to optimise these therapies.

Aim and objectives To identify and propose patients who could benefit from ART simplification, from dolutegravir/abacavir/lamivudine (DTG/ABC/3TC) to dual therapy dolutegravir/lamivudine (DTG/3TC), and to analyse the economic impact of simplifying the regimen.

Material and methods A prospective study was conducted in a second level hospital in March 2020. All HIV patients with active ART (>6 months) with DTG/ABC/3TC were included. Patients who were candidates for simplification had to meet the following criteria: treatment with DTG/ABC/3TC for at least 6 months, absence of failure prior to another ART, undetectable plasma viral load (VL) for at least 6 months (undetectable being <50 copies/mL) and optimal adherence. Adherence was indirectly calculated by scoring the days that treatment was collected on time; 95% score or more was considered optimal. Adverse effects (AE) related to ART therapy were also recorded and taken into account, but they were not an indispensable requirement for simplification. Candidates were proposed to their doctor. The annual economic impact was evaluated by analysing laboratory sales prices in Spain and the number of patients who had a simplified ART.

Results 64 patients were included, 52(81%) were men, with a mean age of 48 (27–77) years. 38 (59%) patients had at least one prior ART and 10 (26%) of these patients failed on previous ART and consequently were excluded for simplification. Of the total number of patients receiving DTG/ABC/3TC, 50 (78%) presented undetectable VL, 44 (69%) had optimal adherence and 27 (42%) had some type of mild AE: 10 (37%) patients presented with neurological symptoms, 10 (37%) with dyslipidaemia and 7 (26%) with gastrointestinal upset. 31 (48%) patients met the criteria for simplification to DTG/3TC and 27 (87%) treatments were changed. This gave a saving of 49 288€ per year.

Abstract 4CPS-375 Table 1 Multivariable logistic regression model

Variable	Adjusted odds ratio	p value
Male	1.151	0.0273
Age	1.031	<0.0001
Body mass index	1.001	0.8989
Haemoglobin (women <12 g/dl, men <13 g/dl)	1.331	0.0192
Creatinine	1.040	0.6839
Aspartate aminotransferase (women >93 U/L, men >111 U/L)	2.243	0.0965
No of previous emergency department visits	1.547	<0.0001
No of previous hospital admissions	1.298	<0.0001
No of previous unplanned hospital admissions	2.452	<0.0001
No of previous general practitioners contacts	1.017	0.0098
Polypharmacy (5–9 drugs)	0.999	0.9887
Excessive polypharmacy (>9)	1.365	0.0062
No of chronic comorbidities	1.045	0.0003