drugs prescribed per patient were 7 days and 10±3.5 drugs, respectively. Fifty-nine patients (72%) had at least one DACE prescribed (an average of two DACE per patient). Most common DACE grouped by ATC were: anxiolytics (N05B, n=30), antidepressants (N06A, n=28), antipsychotics (N05A, n=22), opioids (N02A, n=16) and antiepileptic (N03A, n=14). Thirty-two (39%) patients had a moderate anticholinergic risk (median DBI 0.6) and 27 (33%) patients had a HAR (median DBI 1.5). Four out of 27 (15%) interventions were accepted and consisted of two dose reductions and two DACE deprescriptions. The interventions were not accepted mainly because the drugs were part of the patient's chronic psychiatric or neurological treatment, the presence of refractory pain or insomnia disorders.

Conclusion and relevance Our pharmacological intervention was poorly accepted by physicians. During the hospitalisation process it is difficult to re-evaluate the need for adjusting chronic medication, especially related to psychiatric or neurological pathologies. For future studies we believe that this type of study would have more impact at the primary care level.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-189 FALL INCIDENTS IN NURSING HOME PATIENTS: DEVELOPMENT OF A PREDICTIVE CLINICAL RULE (FINDER)

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Background and importance Fall incidents are common among nursing home patients. Different tools have been developed in the prevention of fall incidents but with unsatisfactory results.

Aim and objectives To develop (part I) and validate (part II) a clinical rule (CR) that can predict a fall risk in nursing home patients.

Material and methods The study was conducted in two parts. In part I, the variables which could lead to an increased risk of falls were determined and implemented in the predictive clinical rule. Subsequently, data from a retrospective cohort study were used to validate the developed clinical rule.

Multiple linear regression analysis was conducted to identify the fall risk variables in part I. With these, a predictive fall risk algorithm was developed where the overall prediction quality was assessed using the area under the receiver operating characteristic curve (AUROC), and a cut-off value was determined for the predicted risk ensuring a sensitivity $\geq$0.85. This prediction model and cut-off value were externally validated in part II.

Results A total of 1668 (824 in part I, 844 in part II) nursing home patients were included in the study. Eleven fall risk variables were identified in part I. The externally validated AUROC of the prediction model, obtained in part II, was 0.603 (95% CI 0.565–0.641) with a sensitivity of 83.41% (95% CI 79.44–86.76%) and a specificity of 27.25% (95% CI 23.11–31.81%).

Conclusion and relevance Medication data and patient characteristics were not sufficient to develop a successful clinical rule with a high sensitivity and specificity to predict the risk of falls.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-190 EVALUATION OF A NEW CLINICAL PHARMACY SERVICE WITHIN A NEWLY LAUNCHED SURGICAL ADMISSION PROCESS

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Background and importance Clinical pharmacy services (CPS) targeting the admission of surgical patients have been shown to provide significant benefit for patient safety and care.

Aim and objectives To evaluate a CPS within a newly launched integrated admission process for elective surgery patients: (1) by defining the number and type of identified drug related problems (DRPs) and acceptance rate of pharmacists' suggestions for medication optimisation; and (2) by assessing the perception of the service and identifying barriers and optimisation potential.

Material and methods This was a retrospective descriptive analysis of number and type of identified DRPs, suggested interventions and their acceptance rate based on a validated classification system.[1] We also determined the health professions' perceptions towards the new service, measured using a piloted self-administered quantitative questionnaire.

The setting was a 450 bed teaching hospital, with an on-site service implemented within a central integrated admission process for elective patients across four surgical wards. All patients receiving the CPS in the data collection period (April–December 2018) were included. Questionnaires addressed medical and nursing staff on covered surgical wards (4 week data collection period).

Results Pharmacists reviewed 1877 patient files (6214 drugs) and identified 2003 DRPs, on average 1.07 DRP/patient. The most common DRPs were drug interactions (31%), drug without indication (20%), need for monitoring (14%) and untreated indication (11%).

The most common recommended interventions were drug monitoring (30%), starting a drug (13%) and stopping a drug (13%), and advisory information was provided (17%). Overall, 22% of interventions were implemented. Identified barriers were lack of awareness of the pharmacists' e-consults, limited time resources and the surgical setting.

The questionnaire confirmed the benefits, indicating patient safety, medicine optimisation and reduced workload for medical staff. The CPS was rated as 'good'.

Conclusion and relevance The high prevalence of identified DPRs reflected the contribution of the CPS towards improved patient safety and care. The questionnaire highlighted the value and acceptance of the CPS by other health professions and identified barriers to further adaption. The acceptance rate can be perceived as successful considering the limitations of the short on-site stay of surgical patients and the recent implementation of the CPS in April 2018. Hence the data showed clear benefits. The role of the clinical pharmacist within the central admission process should be further established to exploit further potential for CPS in this field.

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No conflict of interest.

4CPS-191 PHARMACEUTICAL INTERVENTIONS IN A MEDICATION RECONCILIATION PROGRAMME ON ADMISSION IN SURGICAL PATIENTS

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Background and importance Medication errors at hospital admission are common, increasing morbidity and mortality. The pharmacist can help to prevent the occurrence of medication related problems through medication reconciliation.

Aim and objectives To analyse the pharmaceutical interventions performed during the implementation of a medication reconciliation programme on hospital admission to reduce medication errors (ME).

Material and methods This was an observational prospective study (October 2018–September 2019). Patients older than 65 years who received at least five drugs and had more than 24 hours of admission in the general surgery and urology units were included. Variables considered were age, sex, number of prescribed drugs and ME. The best pharmacotherapeutic history was developed, including diagnosis, medical history and complete list of chronic home medication, consulting the electronic history programme of electronic prescriptions. This information was completed with an interview with the patient/caregiver. In the event of any discrepancy, the responsible doctor was contacted.

Results Medication reconciliation was conducted for 553 patients. Median age was 75 years and 56.6% were men. The average number of medications per patient at admission was 8.2. A total of 4567 drugs were reconciled, with a total of 2404 interventions in the discrepancies found: 1586 (65.9%) were justified while 818 (34.1%) were classified as unjustified or ME (omission (90.17%), dose (2.7%), frequency, schedule or route of administration (1.69%), therapeutic duplicity (1%) and other), with a degree of acceptance of 62%, correcting the discrepancy in most cases before 24 hours had elapsed. Communication with the doctor was done by electronic messaging in 91% of cases.

Conclusion and relevance We observed that during the medication reconciliation, numerous ME were detected, the majority of which were omission of medications. The involvement of the pharmacist, integrated into a multidisciplinary team together with doctors and nurses, allowed the detection of discrepancies, obtaining a high percentage of acceptance of the interventions, thus reducing ME. The medication reconciliation programmes allow the detection and resolution of discrepancies, preventing ME in healthcare transitions.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

4CPS-192 ESTIMATING THE SURVIVAL PROGNOSIS OF PATIENTS WITH ADVANCED GASTROINTESTINAL MALIGNANCY ON HOME PARENTERAL NUTRITION: A RETROSPECTIVE, MONOCENTRE STUDY

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Background and importance The initiation of home parenteral nutrition (HPN) in patients with advanced malignancy is a highly controversial topic. Guidelines recommend reserving this therapy for patients with an expected survival of longer than 2–3 months. Administering HPN in patients with a shorter survival probably has little benefit, while creating the risk of PN related complications. As HPN in advanced cancer patients is becoming increasingly common in our hospital, we wanted to investigate whether current practices are supported by the rational use of HPN.

Aim and objectives Firstly, this study sought to investigate the proportion of patients with advanced cancer receiving HPN in our hospital, surviving for longer than 2–3 months. Furthermore, we wanted to investigate whether the application of survival prediction models could improve estimation of the length of patient survival.

Material and methods Survival proportions of 250 patients with advanced gastrointestinal malignancy receiving HPN in our hospital during 2008–2016 were examined. Additionally, agreement was assessed between observed survival times and the current inhospital survival prediction method (ie, physician's clinical judgement) or survival estimation by a published prediction nomogram. Moreover, through the use of multivariable logistic regression on variables gathered from the studied patient set, both a 2 and 3 month survival prediction model were constructed and validated.

Results The results showed that a relatively low proportion of patients actually met the proposed survival criteria (65.2% and 46.4% for 2 and 3 month survival lengths, respectively). Concerning survival prediction, clinicians predominantly tended to overestimate survival length. Furthermore, application of the published nomogram did not improve survival prediction. Therefore, de novo 2 and 3 month survival prediction models were developed. The 2 month prediction model consisted of four variables: Karnofsky performance score (KPS), Glasgow prognostic score (GPS), gender and serum sodium, while the 3 month model consisted of three variables: KPS, GPS and serum urea. Validation of constructed survival prediction models in an independent set of 99 patients showed discriminatory abilities that were comparable, but not superior, to the results obtained with the aforementioned survival prediction nomogram.

Conclusion and relevance This investigation showed that correct patient survival prediction remains an intrinsically difficult exercise. In order for our constructed models to have clinical utility, further improvement is needed, possibly through the inclusion of additional predictors for survival.

REFERENCES AND/OR ACKNOWLEDGEMENTS

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