Background Thermo-sensitive drugs must be stored overall the circuit, from manufacture to administration for the patient, at 2°C–8°C. The hospital mission is to ensure patient safety and quality of care. Evaluation and improvement of the thermo-sensitive drug management process are essential in preventing and limiting iatrogenic events.
Purpose The present study aimed to assess the risk of the thermo-sensitive drug management process according to a pro-active analysis: failure mode and effects analysis method (FMEA).
Material and methods A multidisciplinary study group was assembled and a process diagram was drafted, illustrating all steps of the cold chain. Failure modes that could occur were identified and classified according to their risk priority score (RPS) determined on the basis of the likelihood of occurrence, the severity of the potential effect and the probability of detection. The failures' causes were closely examined by establishing Ishikawa diagrams in order to propose corrective and preventive actions.
Results The evaluation process detected 42 potential failures. The frequency of failure modes were as follow: 24% in drug storage at the depot step, 21.4% in drug storage in the care units step and 19% in drug storage in the different units of the the pharmacy step. These three steps were considered the most critical. Among the most critical failure modes was the failure of the refrigerator with a RPS equal to 16, the non-compliance of the cold chain during transport with a RPS equal to 60 and the non-control of the temperature at receipt of the thermo-sensitive drug. This last mode of failure seems to be the most critical, with a RPS equal to 80. Preventive measures such as the control of temperature at the drug reception and immediate storage in a freezer box have been proposed to get rid of the most critical failures.
Conclusion FMEA was useful to help understand the cold chain process, detecting possible failures and prioritising remedial interventions. The systematic use of proactive risk analysis is needed for continuous safety improvement of the thermo-sensitive drug management process.

REFERENCES AND/OR ACKNOWLEDGEMENTS
Special thanks to the multidisciplinary group members.
No conflict of interest.

5PSQ-157 IMPACT OF ANTICHOLINERGIC BURDEN, QUANTIFIED BY ANTICHOLINERGIC RISK SCALES, ON COGNITIVE AND FUNCTIONAL STATUS AND FALLS IN PATIENTS WITH MULTIMORBIDITY: A PRELIMINARY STUDY

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Background Taking multiple drugs with anticholinergic risk (AR) can adversely impact cognition and function. There are scales that rank the anticholinergic activity by the mean of the anticholinergic burden (AB) of the treatment, which is the sum of the score for each anticholinergic drug.
Purpose This study investigated the influence of AB on cognition and function in patients with multimorbidity over 65 years.
Material and methods This was an observational and retrospective pilot study of patients with multimorbidity over 65 years. Changes in cognitive and functional performances, assessed using the Pfeiffer and Barthel test, respectively, between 3–15 months, were collected. AB was assessed with the anticholinergic burden calculator (http://www.anticholinergicscales.es/), which contains 10 scales. Included patients had to be treated with at least one drug included in at least one scale for at least half of the period and patients with severe dementia and/or Alzheimer's disease were excluded.
Results One-hundred and seventy-seven patients were included in preliminary analysis (84±7 years, 62% females). The average number of drugs taken per patient was 10±4. The average number of drugs with AB was 4±2. We identified 77 and 41 patients with a change in cognitive disorder (CD) (44%) and functional disorder (FD) (23%), respectively, and 23 patients (13%) suffered falls.

The patients identified with high AB according to each scale were: 96 patients on the ABC scale (54%), 57 on DBI (32%), 45 on DURAN (25%), 35 on ACB (20%), 32 on ADS (18%), 28 on ALS (16%), 28 on CrAS (16%), 20 on CHEW (11%), 19 on AAS (11%) and 10 on ARS (6%).

Fifty-nine patients (77%) with a change in CD and 31 (76%) patients with a change in FD, had high AB on at least one scale. Eighteen (78%) of patients with falls had high AB on at least one scale.
Conclusion We found a high percentage of patients with multimorbidity over 65 years with deterioration of cognitive and functional function when they have taken anticholinergic drugs. Moreover, there are wide differences among the scales' scores. It is necessary for a more exhaustive analysis of the results to determine which scales correlate better with DC and DF in these patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS
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No conflict of interest.

5PSQ-158 INTEREST IN MEDICATION RECONCILIATION AND ESTABLISHMENT OF A PRIORITISATION SCORE IN A VASCULAR SURGERY DEPARTMENT

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Background Patients in the vascular surgery department (VSD) are under several medications, with a high risk of medication error. Medication reconciliation (MR) could help to prevent the risk of a drug iatrogenic issue. Checking the whole admission prescriptions is difficult for pharmacists because of high turnover in the surgery department. Patients with a high-risk error in admission prescription had to be identified.
Purpose The aim of this study was to evaluate the interest of MR in a VSD and to identify a prioritisation score to target patients who should benefit from MR.
Material and methods This study was conducted between February and September 2018. Several sources were collected to identify a list of patients' current medications, by one pharmacist. Comparing this list with hospital prescriptions allowed the identification of divergences. Three classes of divergences were

identified: intentional with notification, intentional without notification and unintentional (UD). For each patient included, a prioritisation score was calculated based on age, number of drugs, comorbidities and different therapeutic class prescribed. A threshold of this score was searched to target the patients with high risk of UD. A Chi^2 test was used to find an association between the score and the presence of UD.

Results During this period, 2720 patients were hospitalised in the VSD, with a mean number of patients admitted per day of 12 (min=1; max=22). Among these patients, 233 patients (9%) benefited from MR. Among these patients, 34% had at least one UD. For these patients, the mean number of medications on admission was nine. Among the 145 UD identified, the main reason for UD was omission (30%) and the most frequent medication was antihypertensive (10%). The median prioritisation score of patients with UD and without UD were, respectively, 11 and 9. There was a significant association between the score $\geq$11 and UD presence ($p<0.01$).

Conclusion MR could identify UD in 34% of patients included. A threshold score has been identified. Currently, MR has been performed to VSD, mainly to patients with score $\geq$11. For a better optimisation of MR time, it will be interesting to include other characteristics, such as the number of patients admitted per day.

REFERENCES AND/OR ACKNOWLEDGEMENTS

Vascular surgery department staff.

No conflict of interest.

5PSQ-159 KEY POINTS IN IMPROVING THE RECONCILIATION PROCESS IN AN EMERGENCY DEPARTMENT

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Background Medication errors commonly occur at transition points in patient care, particularly on admission to hospital.

Medicines reconciliation is the process of identifying the most accurate list of a patient's current medicines and it should be done before the first 24 hour after admission.

The participation of pharmacists in obtaining an accurate medication history for hospitalised patients is a key point in improving the process of reconciliation.

Purpose Evaluate the benefits of the introduction of a pharmacist into the Emergency Department (ED) to improve the reconciliation process.

Material and methods A prospective intervention study (2016–2017). The medication was reconciled at two different times and places: in admission to the geriatric ward (2016) and the admission to the ED (2017).

Patients older than 65 years and six or more drugs admitted to the ward were included. A target was set that ideally 100% of patients admitted would have their medications reconciled within 24 hour of admission.

To calculate the percentage of patients reconciled within 24 hour, the total number of patients who met the inclusion criteria for conciliation were collected. We did not collect data on Saturdays or Sundays. For the inferential statistics, the Chi-square test was used.

Results A total of 394 patients was reconciled, 106 patients in the ward for the first time and 288 patients in the ED for a second time.

The percentage of patients with their medicines reconciled by a pharmacist within 24 hour of admission increased from 38% in the ward to 83% in the ED, and was significant ($p<0.001$).

The lack of weekend cover resulted in not meeting the target of 100% of patients having medication reconciliation complete within 24 hour of admission.

For those patients in the ED who had been admitted medically but awaited a bed on a ward for a number of hours, the opportunity for their medicines to be reconciled within 24 hour was greatly reduced in the absence of an ED pharmacist.

Conclusion The presence of an ED pharmacist improves the number of patients who have their medicines reconciled within 24 hour of admission.

Since this initial project, we must continue working to expand the role of the clinical pharmacist further and to provide an extended pharmacy service to both hospital staff and patients.

REFERENCES AND/OR ACKNOWLEDGEMENTS

No conflict of interest.

5PSQ-160 MEDICATION RECONCILIATION IN THE EMERGENCY DEPARTMENT IN ELDERLY PATIENTS

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Background Medication reconciliation is a process to identify and solve unintended medicine discrepancies, defined as differences between the home treatment prescription and the first hospital prescription.

A large number of studies show that the reconciliation process minimises reconciliation errors (RE).

Purpose To determine the incidence of RE in polymedicated elderly patients admitted to an Emergency Department (ED) and to analyse the type of RE, drug group involved and severity of the RE.

Material and methods A prospective, 2 year intervention study, starting in February 2016.

The medication was reconciled in the first 24 hour after admission to the ED. Patients older than 65 years and six or more drugs were included.

The reconciliation was done by interviewing patients or carers in the ED and by consulting clinical and prescribing records.

A chronic medication list was collected. This list was compared with prescriptions performed during hospitalisation. In cases where a discrepancy that required clarification was found, it was discussed with the doctor. To classify a discrepancy as an RE, the prescriber had to accept it.

Variables collected were: age, sex, drugs prescribed, unjustified discrepancies, potentially inappropriate drugs, interactions and medication-related problems, RE and severity of RE.

Results Reconciliation in the admission to the ED was done with 553 patients, mean age 86 years (65–99), 68% females and 6027 drugs were reconciled (mean 10.9). There were 1050 unjustified discrepancies at admission, 326 potentially inappropriate drugs, 192 interactions and 118 medication-related problems, and 72 RE (average of 0.13 RE per patient).