Practice sting Wrong prescription processing in the medicine roll
this practical incentive is particularly interesting for pharmacists

On average once a month, VMI receives a report of errors in medicines of patients with a medication roll. A pharmacist's assistant has to perform more actions with a prescription for a medicine roll (GDS medication) than when processing an ordinary prescription. To show that a lot can go wrong when processing drug rolls, VMI describes three notifications.

Notifications

1. A cardiologist replaces low-dose acetylsalicylic acid with clopidogrel. The pharmacist's assistant ceases acetylsalicylic acid in the overview of the medicines in use (medication status) and in the separate entry list within the pharmacy software where the medicines are listed for one or more weekly repeats (registration buffer). She then writes clopidogrel as a regular prescription, before putting the medicine in the registration buffer. She receives an interaction signal which the pharmacist wants to discuss with the cardiologist. However, the cardiologist is not available. The cardiologist's assistant took the message and called back a few hours later with the cardiologist's answer. She informs another pharmacist's assistant that acetylsalicylic acid should be used instead of clopidogrel. The pharmacist changes the acetylsalicylic acid medication status from discontinued to active again. The pharmacist does not notice that acetylsalicylic acid had already been removed from the registration buffer. Clopidogrel was not written/not yet started in the registration buffer. Six months later, the patient suffers a myocardial infarction. In the hospital it is discovered that the patient is not taking any platelet inhibitor, no acetylsalicylic acid and no clopidogrel.
2. A general practitioner prescribes a 5-day shock treatment of prednisolone 30 mg. The pharmacist's assistant sets the days in the prednisolone dosing schedule in the registration buffer. When prescribing GDS medication, the default settings are set for continuous use. The registration buffer must be set manually from 'continuous use' to 'occasional', otherwise the software repeats the medication in the registration buffer weekly. Eventually, the patient takes prednisolone 30 mg on the same 5 days of the week for several weeks before the error is discovered.
3. A general practitioner calls the pharmacist to find out what went wrong with a patient who has taken methotrexate from the medication roll, while this was not prescribed. The pharmacist is also surprised about this and investigates this. A methotrexate prescription for another patient was mistakenly written to this patient with a roll of medication. During the check after registration, the pharmacist's assistant sees that methotrexate has been prescribed to the wrong patient. The pharmacist's assistant adjusts the medication status, but forgets to remove methotrexate from the registration buffer.

Analysis

In many pharmacy systems, the registration buffer is a separate prescription processing module for medication in the medication roll. Changes in recipe processing are not automatically entered in the registration buffer and vice versa. In case of report 1, the pharmacist forgets to check the registration buffer and therefore does not observe that acetylsalicylic acid must be put in the registration buffer again. Regarding report 2, the pharmacist's assistant forgets to clear the box with 'continuous' in the registration buffer. As a result, the patient continues to take prednisolone 30 mg on the same 5 days of the week for the following weeks. At report 3, methotrexate had already been put in the registration buffer. After correction of the entry error in the overview of recently used medicines, methotrexate remained in the entry buffer and was delivered.

Recommendations

- Realize that changes in medicines of patients with a medicine role are complex. Have changes in the medication for these patients only carried out by pharmacist assistants who are experienced in using the registration buffer.
- Always check the registration buffer after a change in prescriptions of patients with medicine rolls.