

## Online Appendix 1. Medication safety practices selected for implementation in EuNetPaS project.<sup>14</sup>

Descriptions are based on the information given by the country of origin and they are in format that was used in project.

### Practice and country of origin

### Description of the practice

#### Practice 1: Bed dispensation (A) (Austria)

**Aim:** Reduces the risk of confusion: patients receiving wrong medication or dose; or possible intake by wrong patient. The right patient gets the right medication at the right time.

**Description:** The healthcare professional preparing the medication is also administering it.

Medications are administered per dose directly at the patient's bed.

Mobile carts are used to bring a laptop and a box with the prescribed medications (in original packing) to the patients' rooms.

The implementation of reference times for medication administration was a requirement. The physicians decided about the reference times per ward.

**Evaluation:** An evaluation is done quarterly (per dose, per day) assess patients their medication at the right time and do they take them?

#### Practice 2: Bed dispensation (B) (Austria)

**Aim:** Reduces the risk of confusion: patients receiving wrong medication or dose; or possible intake by wrong patient. The right patient gets the right medication at the right time.

**Description:** The same nurse, using a mobile cart, is responsible for the preparation, checking "right patient, right medicine," the administration, the supervision of the administration and then the documentation of the medication. This is done directly in the patient's location (in patient's room, or directly in front of the door of the room). The medications are taken out of the original packaging and put into the medicine cups.

The medication is administered immediately and the documentation of the administration step follows shortly afterwards.

Each administered medicine is signed off by the nurse, and then put into the patient register with the date, time, and name of the acting healthcare professional.

Definite administration times have been set: in the morning, at noon, at dinnertime and at night. When these times are not kept, this results in a medication error entry.

#### Practice 3: Safety vest (Denmark)

**Aim:** To avoid difficulties experienced during the dosing of a medicine in wards because of disruptions (e.g., due to the location where dosing takes place and the circulation in the ward).

**Description:** Disruptions are very stressful and increase the risk of medication errors.

Errors are often not a reflection of the nurse's qualifications, but of the environment and working conditions. Consequently, the solution is to create more awareness of the need to be undisturbed while dosing medications.

To minimize the noise level and the disturbance for the staff when dosing medicine, a (yellow) Safety Vest with "Do Not Disturb" written on the back is worn by the nurse dosing medications in the ward.

**Practice 4:  
Medication  
reconciliation  
at/on? admission  
and discharge  
(Denmark)**

**Description:** A pharmacist, nurses and a physician in an acute care ward work together in a team to reconcile patients' medications at the patient admission and discharge. The team members look at the medication with different perspectives. They learn from each other and experience where the errors occur.

A pharmacist visits the ward every day. The pharmacist reviews medical records at the time of admission and discharge to identify possible medication discrepancies. The physician is responsible for the possible medication changes based on the review.

New nurses and physicians are offered information and education every month about medication reconciliation by the pharmacist and a nurse who is a specialist in medical records.

**Evaluation:** A sample of medical records is audited each month. The results of the audit is presented to the physicians and the nurses during a monthly ward meeting.

**Practice 5:  
Discharge  
medication list for  
patients  
(Sweden)**

**Aim:** To reduce medication safety risks related to limited patient knowledge on their medication, indication of the medication and on time.

**Description:** The doctor writes a discharge medication list for the patient, in accordance with the patient's medical record. The medication discharge list comprises information on the date of issue, what medication the patient is taking, indication and at which time the medicine should be taken.

At the patient discharge, the health professional goes through orally the discharge medication list with the patient. To be sure that this was followed through, a tick box secures that the patient really got the information.

The patient should be reminded to show healthcare professionals this list when visiting any healthcare setting after the hospital discharge.

**Practice 6:  
Medication  
reconciliation at  
discharge  
(Sweden)**

**Description:** Written discharge information including a Discharge Medication Report is mandatory to be given to a patient at hospital discharge.

The information in the report is structured and easy to understand. A copy of the report is sent with the patient's consent to the general practitioner, community pharmacists or other healthcare professionals participating the medication treatment of the patient on the day of the discharge.

The sent information contains the medication report, a summary of relevant medication changes (due to allergies, resistances etc.) actively performed during the hospital stay (what and why).

The Medication Report is the result of the reconciliation process between healthcare professionals.

**Practice 7:  
Sleep card  
(Sweden)**

**Aim:** Reducing medication safety risks due to unnecessary treatment of patients by sleeping pills.

**Description:** A team consisting of representatives from the unit and the pharmacist has designed a small plastic "leaflet" (the "sleep card").

On the "sleep card", different tips are given on measures to help the patient sleep better. The care also includes information on treatment options (medical and non-medical) and which sleeping medication is appropriate for elderly patients. The "sleep card" is carried around by healthcare professionals.

**Online appendix 2. Evaluation form questions that were slightly adapted for implementation of each medication safety practice.**

**Before the implementation**

- Can you describe the situation or problem in medication safety you wanted to address by implementing the good practice you have chosen?
- Could you give some indications on the baseline situation in medication safety in your unit?

**During the implementation**

- Which procedure was followed to identify/select where good practice will take place?
- Who (role and position in the organisation) and/or which committee has been in charge at all steps of implementation?
- Was the time appropriate, i.e., was there enough time to put the practice into place?
- Have you used the example given by the good practice?
- Have you used any existing elements in the hospital?
- Have you created your own initiative? If yes, why? What was needed to adapt?
- What is the process and who were the professionals involved?
- What have been the specific actions to reach each target group? (e.g.: intranet, newsletter, staff meetings)
- Involved persons in this meetings
- Which activities and by whom have been taken to implement the good practice?
- How did you organise it to implement it into the daily routine?

**After the implementation**

- Can you describe the outcome situation after the implementation period?
- On the basis of your experience do you consider that this good practice would be transferable in other units in the hospital? In other hospitals in your country?
- Have you been using evaluation tools already available in the hospital to evaluate the impact (even subjective) of the initiative?
- If yes, have you noticed any impact?
- Have you been using evaluation tools already available in the hospital to evaluate the impact even subjective) of the initiative?
- In case the initiative was done only in one (some) unit(s), will the hospital expand the initiative to other units?

\* Ireland had modified the evaluation form to include a question: "Did you encounter any issues/difficulties/challenges while piloting this good practice. If yes, describe these".