

# Medication reconciliation in the emergency department

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## Background

- Medication reconciliation (MR) is the process of providing an exact and accurate list of all medications a patient is taking.
- Pharmacists execute MR in the emergency department at Stavanger University Hospital. This is done to ensure that patients get the correct medication as early as possible on arrival at the hospital, thus preventing drug related problems.
- The method used by the pharmacists is based on asking the patients open questions, so that the patients themselves can convey information. Afterwards, a checklist is used.
- This is quite time consuming and it is also based on IMM-methodology (Integrated Medicines Management) that was developed in a time where electronic sources were not available.
- The aim of this project (2018-19) was to make the pharmacist's method for MR at the emergency department more efficient, thus obtaining correct and quality proof medication lists **as early as possible for more patients.**

## Part I: Mapping

- MR took **59 minutes per patient** at average with a mean number of 11 drugs. 79% of the patients in the control group (n=200) had at least one deviation between electronic sources and what medicines they actually used. The average was 1.9 deviations per patient.
- Patient conversation (19 minutes) and journaling (14 minutes) were the most time consuming tasks (fig. 1)
- Generally, the patients expressed satisfaction with their conversations with the pharmacist, but some meant that the checklist was too excessive. Only 5% of the questions in the checklist resulted in relevant findings (fig. 2).

## Part II: Introduction of a new method

- The new method would direct the conversation more, and the purpose of the conversation would be more clearly conveyed by the pharmacist. Among other things, it was emphasized which kind of information had to be told to a doctor, and not to the pharmacist.
- Electronic sources (summary care record/treatment-and-care list between municipality and hospital/multidose list) were systematically reviewed with the patient, next of kin or the patient's care giver.
- The checklist was limited to omit questions about prescription drugs, since these appear in the patients summary care record. To compensate, the patients were instead asked if they used medications acquired from next of kin or other acquaintances.
- The pharmacist's journaling in Dips\* was changed to short comments limited to relevant information, and information that was already implied in Meona\* was excluded. (\* = electronic journal systems at Stavanger University Hospital)

## Results

- The new method averaged on **38 minutes per patient** with at mean number of 11 drugs. 81% of the patients in the intervention group (currently n=100) had at least one deviation between electronic sources and what medicines the patient actually used. The average amount of deviations discovered was 1.9 per patient.
- Patient conversation (14 minutes) and journaling (6 minutes) contributed the most to making the method more effective (fig. 1).

## Conclusion

- The study shows that the new method **reduced the time spent by 36%**, and the results indicates that the streamlining did not significantly affect the quality of the medication reconciliation.

Figure 1: Time consume control group and intervention group

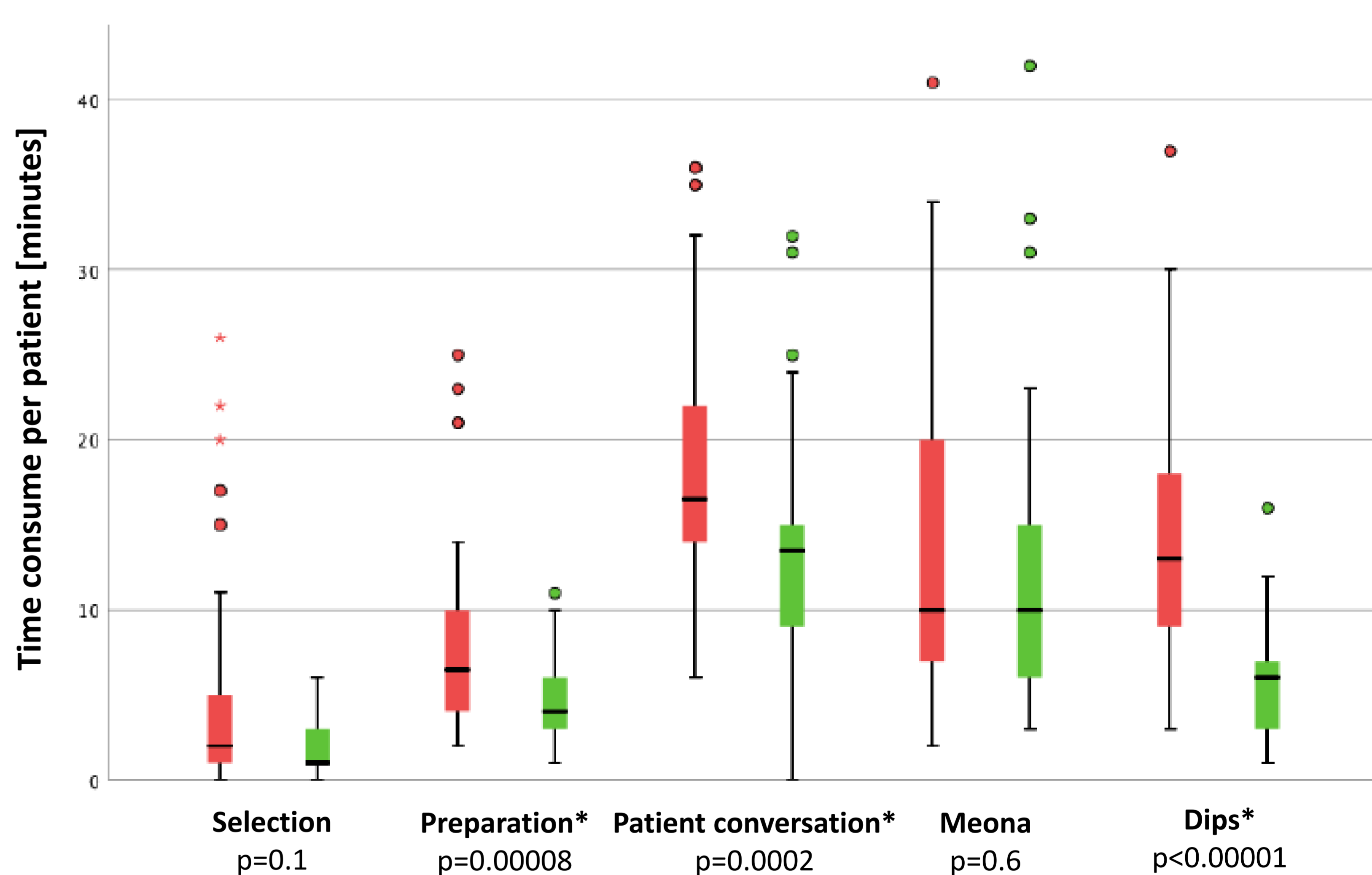


Figure 2: «Do you use drugs for/against ...?» (n=50)

