Patients in charge: why we should implement an online personal health record as a tool for medication reconciliation

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BACKGROUND

- **Medication discrepancies** (MDs), defined as unexplained differences among medication regimens, cause important public health problems with clinical and economic consequences.[¹]
- **Medication reconciliation** (MR) reduces the risk of MDs, but is time consuming and its success relies on the quality of different information sources.[²]
- **Online personalized health records** (PHRs) may overcome these drawbacks, but the correctness of the identified MDs with a PHR compared to traditional MR is unclear.

AIM

The aim of this study is to determine the level of agreement of identified MDs between traditional MR and an online PHR and the correctness of the identified MDs with an online PHR.

METHOD

- A prospective cohort study was conducted at the cardiology, neurology and internal medicine department of the Amphia Hospital, the Netherlands.
- Patients updated their medication file in the PHR derived from the Nationwide Medication Record System (NMRS), a digital nationwide network which exchanges medication dispensing data form all pharmacies in the Netherlands.
- A deviation was defined as a difference between the drug list made by the patient in the PHR and the drug list derived from MR.
- MDs and deviations classified to National Coordinating Council for Medication Error Reporting and Prevention (NCC MERP) class ≥E were defined as clinically relevant.
- The number, type and severity of identified MDs and deviations were analysed.

RESULTS

- 155 patients were included (response rate 32%).
- 7% of all detected MDs (with both methods) were clinically relevant.
- 77% and 64% of the MDs identified with the PHR and MR respectively were errors of commission.

CONCLUSION

- Patients who used an online PHR can relatively accurately record a list of their medication.
- Further research is required to explore the level of agreement and the correctness of a PHR in other (larger) hospital(departments).

REFERENCES AND ACKNOWLEDGEMENTS