4CPS-229 - THE ADDED VALUE OF A NATIONAL ELECTRONIC HEALTH RECORD FOR THE BEST POSSIBLE MEDICATION HISTORY OBTAINED BY A CLINICAL PHARMACIST

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Background and Importance

Obtaining the Best Possible Medication History (BPMH) is an essential step in the medication reconciliation process, that should ideally be based on the most appropriate sources of information, to which access is often limited. Utilization of a National Electronic Health Record (NEHR) system aims at streamlining this process by converging relevant data into a singular database.

Aim and Objectives

This research aimed to assess the added value of NEHR to BPMH. In addition, the quality of NEHR-based BPMH was compared to the former physician/nurse-led Standard of Care (SoC), in order to explore the added value of clinical pharmacy services in obtaining BPMHs.

Materials and Methods

- **Study place:** general surgery department of a county hospital.
- **Patient enrollment:**
  - minimum 18 years of age,
  - admitted from their homes,
  - at least one regularly taken prescribed medication,
  - without major communication difficulties.
- **Methodology of medication reconciliation process initiated by clinical pharmacists is shown in Figure 1.**
- **Primary outcome:** the frequency and types of medication discrepancies derived from the comparison of the aforementioned lists, including the former SoC.

Results

The study included 100 patients (52% female, average age=62 years).

**Comparison of NEHR list to Hospital list:**
- 231 discrepancies (median=2; IQR=4),
- 64.0% of the patients affected,
- Most common discrepancy: drug omission (64.9%) and incorrect daily dose (26.4%).

**Comparison of BPMH list to SoC list:**
- 303 discrepancies (median=3; IQR=3),
- 90.0% of the patients affected,
- Distribution of the discrepancy types is shown on Figure 2.

Conclusion and Relevance

Based on these results, the NEHR can contribute to the compilation of a more prudent BPMH due to its more comprehensive data content. This methodology may, in turn, facilitate the prevention of multiple medication-related errors. These outcomes also underline the necessity of pharmacists’ access to such national systems.

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