

How well do electronic health records support medication administration in paediatric hospitals?

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Accurate documentation of medication administration is particularly important given that **medication errors** continue to be the **leading cause of incidents in hospitals**. Few studies have examined how effectively electronic health records (EHRs) support medication administration documentation and processes, and the design features that facilitate accuracy.

Objective

To **compare** the accuracy of **medication administration documentation** in an **EHR with paper medication charts** at a tertiary paediatric hospital.

Methods

Nurse observers **recorded details of medication administrations before and after implementation** of electronic medication management **in an EHR**. Details included whether the medication administration was signed for, time of signing, the method of administration.

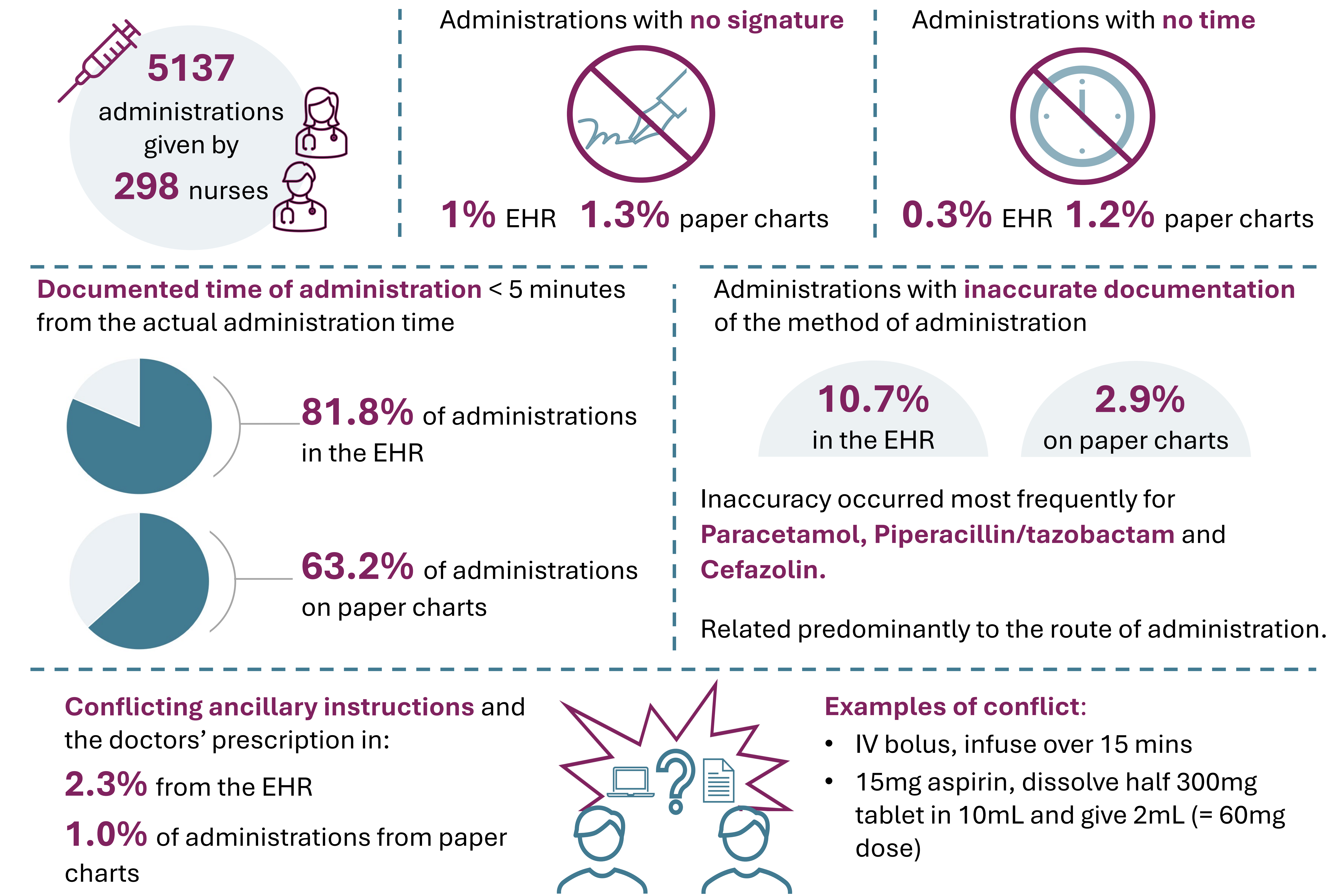
Data was compared to the nurses’ documentation on medication charts to **identify discrepancies**.

Outcomes: the proportion of administrations with:

- i) no signature
- ii) no time
- iii) inaccurate documentation of method of administration
- iv) ancillary instructions not matching doctors’ instructions

We also examined the difference in the administration time documented compared with the actual time medication was given

Key Findings



Conclusion

Completeness and accuracy of documentation of medication administrations was generally high using paper or EHR charts. However, **auto-population** of **method of administration** in the EHR likely **facilitated inaccurate information**. Allowing nurses to annotate details of an administration when signing off may improve accuracy. **EHR use** was associated with a reduction in the time lag between administration and recording time of administration suggesting **improved efficiency in the process**.

