Reviewer's report

Title: Influence of hospitalization on prescribing safety across the continuum of care: an observational study

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Reviewer: Anne Spinewine

Reviewer's report:

This is an observational study describing the prevalence of prescribing errors and of medication discrepancies from admission to discharge. The main weakness of the paper is that the primary objective is unclear (ie prescribing error vs medication discrepancies?) and that the methods used to identify prescribing errors and medication discrepancies are insufficiently described.

- Abstract
  o The method used for identifying errors should be mentioned
  o What is the difference between prescribing-related risks and prescribing errors?
  o The authors should make clear in the abstract what is the primary outcome measure for their study
  o 461 differences per 100 hospitalisations: giving the median or mean number of differences per patient would be more relevant
- Introduction
  o The authors should refer further to the published literature. Furthermore, there is no clear link between current state-of-the-art and the objectives of the study
- Methods
  o “Transfers from and/or to other institutional health care facilities were excluded. Why were these patients excluded?”
  o The authors clearly explain how they performed a comprehensive medication history. Can they clarify whether this information was made accessible in patient’s record and therefore to physicians caring for the patient?
  o Evaluation of prescribing errors: additional information should be provided:
    # Who did this analysis? Has there been any assessment on the reliability of this process? Validity? Why was a validated tool not used (eg Medication Appropriateness Index)?
    # Were acute as well as chronic medicaitons evaluated? Regular as well as prn drugs?
    # What was the “role” and work done by the CDSS? Please describe this in details?
  o Evaluation of discrepancies: were intentional as well as unintentional
discrepancies evaluated? Which categories of discrepancies were identified (addition, omission, dosage, frequency,…) How did you categorize? Did you face the problem of surgical discharge letters mentioned “generic terms” such as “resume chronic medications”? If so how did you deal with that?

o Similar to the abstract, the authors use the term “prescribing related risks” but do not define it. Please clarify what this means and how this was evaluated.

- Results

o The authors state that 200 patients were recruited; in the methods they mentioned that patients were recruited on a 5-month period from a large teaching hospital. Were all eligible patients recruited over that period? I would be surprised that it takes 5 months to recruit 200 patients over such a period in a large hospital.

o It would be useful to provide data on medication classes most frequently involved with prescribing errors.

- References

o The list is far too short and highlights that the authors insufficiently linked their work to published data

**Level of interest:** An article of limited interest

**Quality of written English:** Acceptable

**Statistical review:** Yes, but I do not feel adequately qualified to assess the statistics.

**Declaration of competing interests:**

No conflict of interest to declare