

Article details: 2021-0071	
Title	Effect of electronic medication reconciliation at the time of hospital discharge on inappropriate medication use in the community: an interrupted time series analysis
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Reviewer 1	Prof. Professor Samy Azer
Institution	King Saud University, University of Melbourne Faculty of Veterinary and Agricultural Sciences
General comments (author response in bold)	<p>1. Thank you for asking me to review the above-titled manuscript. The paper is well-written, informative, and used a sound study design. However, there are issues to be considered by authors. Page 5, lines 40-44: State briefly why these three groups of drugs, in particular, were selected.</p> <p>a. We have detailed the rationale for the selection of these drugs in the methods section, under outcome. In the interests of brevity, I did not repeat the reasons in the introduction, but did add the relevant references to this section.</p> <p>2. Page 6, "data source" and "enhanced electronic medication" add citations/references or URL.</p> <p>a. The references for the data sources (eight in total) are included in appendix 1. This was necessary due to the word count/reference count limitations. Unfortunately, there is not an appropriate reference for the EEMRS section.</p> <p>3. Page 7- "fracture risk with prolonged use". Define what is prolonged use, which of these drugs, and give a reference for this.</p> <p>a. There is not a clear definition of prolonged use across the various studies, but the risk generally seems to measurable after a year of therapy, with the risk increasing with longer exposure. Reference 14 (Sheen et al) covers this issue, and is already included in the paper.</p> <p>4. Page 8: Statical analysis: Please add citation/references.</p> <p>a. Reference 20 (Yaffee) describes details of interrupted time series analysis, and reference 21 (Wagner) describes the model assumptions that were evaluated.</p> <p>5. The Study limitation: The authors should include that falls, and fractures could also be due to other factors such as osteoporosis, problems with the balance system, dementia, obesity, smoking, alcohol intake etc. these were not addressed in the study but should be stated in the study limitations.</p> <p>a. The etiology of the fall/fractures are definitely multifactorial. Our goal was to see if there was change at a specific point in time. It is unlikely there was sudden change in the proportion of people who are discharged from hospital who had dementia/obesity/smoking etc. We have acknowledged the possibility of confounding in our limitations.</p> <p>6. Table 1: One would wonder why did not the authors include smoking, alcohol intake, BMI, social habits etc., in table 1?</p> <p>a. Similar to all routinely collected data studies, we do not have</p>

	<p>information on all patient characteristics. We measured several relevant characteristics that were available to us, and included these in Table 1.</p> <p>7. The list of references could be strengthened.</p> <p>a. We believe we have selected an appropriate, contemporary list of references that support our study background, methodology and discussion.</p>
Reviewer 2	Dr. Shayna Watson
Institution	Queen's University
General comments (author response in bold)	<p>Thank you for this study to address the important issues of poly pharmacy and the continuation of unnecessary prescriptions at hospital discharge.</p> <p>I have a couple of questions:</p> <p>1. Can you clarify the relationship with IQVIA Solutions?</p> <p>a. We have no relationship with IQVIA Solutions. They are healthcare informatics company that provided a drug identification database to ICES for research use. They have no relationship with the study investigators, and they do not have any participation in clinical studies conducted at ICES.</p> <p>2. How were primary care/ community providers engaged in this study?</p> <p>a. We did not directly engage primary care providers in this study. Primary care physicians affiliated with the London hospitals participated in the implementation of the electronic medication reconciliation, however participation in this study was limited to hospital-based physicians and knowledge users. We hope to continue our work and look at processes of care around discharge summaries/medication reconciliation that can improved, and we hope to engage primary care in these projects in the future.</p> <p>3. Can you explain why the use of these medications increasing in the years prior to the intervention?</p> <p>a. This was an unexpected finding, and one we do not have a definitive answer for. The clinical members of our research team feel that stress ulcer prophylaxis was becoming more prevalent outside of the ICU setting, and this may have increased the use of gastric acid suppressants. There also seemed to be more of an acceptance within medical and surgical services to treating in-hospital sleep and delirium with antipsychotics over that time period.</p> <p>4. Appendix 3 - did you use code E080A - first post-hospital office visit within 2 weeks? What was the impact of this visit on continuation of medication use and return to hospital?</p> <p>a. This is an excellent idea, and something that we would be interested in pursuing in future studies. It would be an interesting opportunity to engage our family physician colleagues, as we could see if potentially inappropriate medication prescribing is impacted by family physician followup. Unfortunately, it is not possible to pursue this research question right now given our limited project specific funding.</p>