

## PEER REVIEW HISTORY

BMJ Open publishes all reviews undertaken for accepted manuscripts. Reviewers are asked to complete a checklist review form ([see an example](#)) and are provided with free text boxes to elaborate on their assessment. These free text comments are reproduced below. Some articles will have been accepted based in part or entirely on reviews undertaken for other BMJ Group journals. These will be reproduced where possible.

### ARTICLE DETAILS

<b>TITLE (PROVISIONAL)</b>	A Pilot Study on record reviewing with a priori patient selection:
<b>AUTHORS</b>	Cihangir, Sezgin; Borghans, Ine; Hekker, Karin; Muller, Hein; Westert, Gert; Kool, Tijn

### VERSION 1 - REVIEW

<b>REVIEWER</b>	Ronald Lagoe Executive Director Hospital Executive Council Syracuse, New York, USA  I declare that I have no competing interests with the authors.
<b>REVIEW RETURNED</b>	15-May-2013

<b>GENERAL COMMENTS</b>	<p>This is a well written and well researched manuscript that is deserving of publication. Within the manuscript, however, there are a few topics that could deserve more discussion under the rubric of minor revisions, at the discretion of the Editor.</p> <p>Within the Introduction, the importance of this topic could be discussed further with respect to one or more of the following issues.</p> <p>Within health services research, increased attention is focusing on patient outcomes. This results from the need to improve care and the need to reduce costs. As studies increasingly evaluate patient care, the need exists to identify adverse outcomes within patient medical records. This is a major challenge because medical records are usually extensive and sometimes difficult to evaluate.</p> <p>In the United States, this subject is being addressed by computer algorithms such as the Potentially Preventable Complications and the Potentially Preventable Readmissions software. These algorithms use hospital discharge abstract data to identify adverse outcomes in large populations. The development of these algorithms has been a long and resource intensive process.</p> <p>The authors have addressed this important subject by developing a tool for identifying adverse outcomes in the Netherlands. Their research involved patients at a large hospital where the volume of inpatients makes the identification of specific patients with adverse outcomes a challenging undertaking.</p> <p>Another topic that might be discussed further in the Methods section could be the use of patient medical records rather than administrative data.</p>
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	<p>The authors of the article have pursued an approach to this subject that works directly with patient medical records rather than discharge abstract data. In so doing, they have removed the use of administrative data as an intermediate step and developed a tool which identifies adverse outcomes directly in hospital medical records.</p> <p>Within the Discussion, it might be noted that the effectiveness of the tool developed by the authors was impressive, demonstrating that a large majority (84%) of the records identified contained one or more adverse events compared with only 9 percent in the group not identified.</p> <p>Within the Discussion, it also might be noted that the tool developed by the authors was based on a single specialty population and that validation on other populations would be useful.</p>
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<b>REVIEWER</b>	<p>Lecturer  Kristina Schildmeijer  School of Health and Caring Sciences  Linnéaus University  SE-391 82 Kalmar  SWEDEN</p> <p>I declare that I have no competing interests.</p>
<b>REVIEW RETURNED</b>	20-May-2013

<b>THE STUDY</b>	<p>In the Introduction the authors mentioned that the physicians not can spend hours reviewing patient records, i.e. it is very time-consuming. BUT; It seems to me that in this study, every chart containing triggers were handed over to the physicians. By the method; The nurses should read and then come to consensus. Records with potential AEs should then be handed over to the physicians. The physicians do not review the records, they authenticates the findings of adverse events and rate the severity found by the reviewing nurses.</p> <p>The number of reviewing nurses is unclear. One or more? The review process is not really clarified by the authors.</p> <p>The physicians and the nurse/s were trained according to IHI Trigger Tool programme. Did they have experience of reviewing according to the IHI method in practise?</p> <p>The reference group and the UL-LOS group were comparable. In which way?</p> <p>The number of records were unknown until the Result section. Perhaps you should put the reference to the NCC MERP scale to your reference list.</p>
<b>RESULTS &amp; CONCLUSIONS</b>	<p>The discussion section is thin and in lack of other references. Length of hospital stay affects the AEs, this is known by others, e.g. Sari et al; 2007;16:434-9 Qual Saf Health Care (which you already have in your reference list) and Classen et al 2011;30:581-9.</p>
<b>GENERAL COMMENTS</b>	<p>In the Conclusions you have put "autors". I think you mean "authors". I am not totally agree with your conclusion about saving the physicians valuable time. I think you can save a lot of time by letting the nurses review by the handbook and leave to the physicians to determine the nurses findings and to assess the severity of harm.</p>

	<p>The reference list need some work to be done. E.g. From the guidelines;  "12 Surname AB, Surname CD. Article title. Journal abbreviation Year;Vol:Start page–End page." Vol should be written in bold.  &gt;List the names and initials of all authors if there are 3 or fewer; otherwise list the first 3 and add et al."  Ref 12) 3rd ed. and Ref 27) Second edition.  The GTT can be used in many ways and in different settings. You have pointed out one interesting way to use the method. Good luck with your further work!</p>
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### VERSION 1 – AUTHOR RESPONSE

Points raised by Ronald Lagoe

We thank Reviewer Ronald Lagoe for his constructive feedback and suggestions. We were quite happy with his suggestions which were in relation to introduction, method and discussion.

In relation to the introduction Reviewer Ronald Lagoe made some suggestions to discuss the importance of the topic. We now adapted in the first and second paragraphs his suggestions regarding the introduction. As a part of these adaptations, we now refer to the next study: Lagoe RJ, Westert GP, Czyz AM, et al. Reducing potentially preventable complications at the multi hospital level. BMC Res Notes 2011;4:271.

With regard to method section, the Reviewer Ronald Lagoe suggests us to make clear that we worked directly with medical records rather than discharge abstract data. In fact, we do use discharge data as a first step. As a second step, we work directly with patient medical records. We understand that this could be stated more directly in the method. We think that we clarified this point now in the method section, hope you agree.

Reviewer Ronald Lagoe suggested to mention that the effectiveness of the methodology developed in the current research is impressive, demonstrating that a large majority of the records identified contained one or more adverse events. We are happy with this suggestion of the reviewer and adapted it in the discussion. To illustrate the effectiveness as the reviewer suggested, we also put the following in the discussion: "Putting it another way, by reviewing only the UL-LOS group with at least one trigger, which is 40% of all patients, we found 91% of all records with at least one adverse event in the colorectal patient group."

Finally, the point raised by the reviewer on the single population, is now emphasized in the discussion.

Points raised by Kristina Schildmeijer

- We do agree with Reviewer Kristina Schildmeijer that the reviewing process can indeed be even more effective by letting nurses do the review process. We thank the reviewer for mentioning this possibility and we discuss on this point in discussion section.

- In the method, we made now clear that only one, experienced nurse did the review process for finding triggers

- The physicians who did the review process did not have experience in reviewing according to the IHI method in practice. However, the training they received to conduct this study, was extensive to make sure that they worked according the IHI method. We now made this point more clear in the method section.

- The patients were comparable because they are from the same specialty population. This point is now made clearer in the method section.

- We mention now the number of records in the method under the section "reference group".
- Reference to NCC MERP scale is now added in the reference group.
- We now added the lacking references into our reference list. We thank the reviewer for pointing out those references.
- The misspelled word "autor" is adjusted at the submission website of the journal.
- We do agree with the Reviewer Kristina Schildmeijer that the time of physicians can be saved even more in case nurses would identify the adverse events. We thank the reviewer for this point of view which we mention in the discussion section.
- We thank the reviewer for her comments on the Reference list which we now improved according to BMJ Open standards.
- We also thank the reviewer for her insights on many ways of using Global Trigger Tool to improve quality of care. We now mention this point in the discussion.