Reviewer's report

Title: Leveraging workflow control patterns in the domain of clinical practice guidelines

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Reviewer: Claudio Eccher

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On one hand, I agree with Dr. Fernandez-Llata: "Why the authors plan to execute in languages as Asbru or Proforma, when there are a lot of more efficient and effective engines for execute formally described workflows."

This was also a question that I posed in my first review. The answer of the authors is not completely satisfying, taking into account that there are workflow (and BPMN) execution frameworks that include rule engines for controlling the flow of the process at decision steps, and that the workflow languages offer a richer set of constructs to assign the task to different roles/actors. The CPG languages, however, are superior in managing temporal conditions.

On the other hand, I completely agree with Dr. Acosta "contribution of this work is the analysis of the expressiveness of workflow patterns for modelling frequently occurring constructs in CPG and the proposal of semi-automatic transformations of these workflow patterns specified in BPMN into Asbru and PROforma."

Although the number of guidelines analyzed is limited, and the analysis was performed only by two computer scientists (very expert in this field, anyway), the manuscript is interesting for the researchers in computerized guidelines, because of the method presented for translating BPMN patterns into CPG language. Moreover, from my point of view, having worked on Asbru and trying now to design a DSS for clinical pathways based on a workflow language, the manuscript is interesting also as a starting point for the correspondence between CPG models and models in a workflow language.

Level of interest: An article whose findings are important to those with closely related research interests

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.