

Review of: "Chronic disease treatment default prediction with random sampling optimization."

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Potential competing interests: No potential competing interests to declare.

The challenges of imbalance data in machine learning is very important and little studies have touched on this issue, especially in the applications that have small size data. based on my reviewing, I could not find any new contribution /method. However, the authors may unable to display that; therefore, many sections need revising and rewriting or modify to be more valuable. I have provided my comments as follows.

- Abstract
- Please mansion to the assessment evaluation matric that used.
- Rewrite the abstract. To explain the topic more effectively, ensure that each expression clearly communicates one main point. Report the objectives and conclusions of your study in an understandable way so that readers get exactly what your work is about.
- Introduction
- Add paragraph explain the challenges of imbalance data how this effect the classification to be more prejudiced towards the dominant class and could disregard the minority class entirely.
- Set the objective contribution of paper / proposed methods.
- Add paragraph at the end of introduction presents the organization of manuscript.
- Related Works

This section is very brief, I could not touch the methods used/ proposed/ solution in literature, so rewrite the section and presenting state-of- the arts in this scope.

- Proposed Mechanism
1. The methodology is not clear. In context, there is confusion between methodology and experiments. explain the method of sampling in detail. Also, I could not find any contribution or any new solution.
 2. Explain the pre-sampling, over and under-sampling strategy. and mention any new mechanism that is proposed in this paper.