**Paper ID**: 003

**Title**: Neural CDEs as a Solution to Irregular HER Data in 30-Day Unplanned Heart Failure Readmission Prediction\*

**Author(s)**: Ryan Missel

Use of acronyms in title

**Abstract**

Well written, covers everything

Impact/significance

**Intro**

The first two sentences are same as the abstract’s.

Motivation for the solution explained well.

Problem in previous models like linear models, SVM, deep sequence models explained well.

1.2: 2nd last para – grammatical error

1.2: last para: Instead of mentioning the reference numbers alone, mention a single line summary of the paper.

Contributions mentioned clearly and code and detailed specifications provided for reproducing the results.

**Related works**

Limitations and contributions by previous works mentioned clearly in detail. Maybe too long.

**Methods**

**Dataset**

Detailed Descriptions of data source and dataset given. The modifications and filtering, and processes involved to get the final dataset also mentioned clearly. (well justified)

**Features**

Features well defined and categorized accordingly into demographics, time series, chronic with justified explanations with facts and figures provided.

Selection of features like demographics data(including insurance type) explained well. (eg correlation of insurance type to readmission prediction due to early discharge)

Biasness and imbalance in the data analyzed

Wide variety of models explained and evaluated with examples including the feature representation of each model and steps involved:

Baseline regression model and model selection established well.

In many portions, table and description in different pages

Similar feature representation for CDE model would be better

Results well tabulated and explained, compared between different models.

Additional points or future works to address the current limitations could be added (well written)

Page number with author name was a little misleading especially in the last page (references)