

# Analysis of Classification Techniques for Prediction of Tuberculosis Defaulters

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## ABSTRACT

### 1. INTRODUCTION

South Africa has the second highest incidence rate of Tuberculosis (TB) per 100 000 of the population [4]. Its neighbour, Lesotho, has the highest rate of TB per 100 000 of the population [4]. South Africa has the sixth highest incidence rate of TB in terms of absolute occurrences [4]. The consequences of defaulting TB treatment include: increased drug resistance, increased health system costs [2, 3], higher risk of mortality, continued risk of transmitting the disease to others [2] and increased rate of recurrent disease [1]. The spread of TB can be reduced if the individuals who have a high risk of defaulting can be predicted. This will also reduce health system costs.

1. Discuss datasets used and possibly expansion of TB issues in those specific counties (Peru and Malawi)
2. Outline briefly how the datasets are used and that each technique is also benchmarked against the well known Australian and German financial to determine how applicable credit scoring research is to TB default prediction for the two TB datasets.
3. Link TB classification to credit scoring and outline notable similarities and differences
4. Summarise overall paper

### 2. RELATED WORK

1. Summarised version of original literature review except the parts using temporal aspects
2. Summarise what has been done determining TB predictors (which is a different aim)
3. Summarise what has been done in the credit scoring financial space as a lot of research has been done in this field.

### 3. METHOD

1. Outline
2. Brief overview of each classification technique and possibly give a reason why this technique may work well for our application

### 4. RESULTS

### 5. DISCUSSION

### 6. FUTURE WORK

### 7. CONCLUSIONS

### 8. REFERENCES

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