

## **106. ARS: ASSOCIATION RULE SUMMARIZATION TECHNIQUES TO DETECT RISK OF DIABETES MELLITUS**

V.Kavitha(Pg scholar), Mr.Mohan.R(Asst.Professor)

Department of CSE

Mailam Engineering college,

kavivengu@gmail.com

In Data Mining, association rule learning is a popular and well researched method for discovering interesting relations between variables in large databases. To Apply Association Rule Mining to electronic medical records (EMR) to discover sets of risk factors and their corresponding subpopulations that represent patients at particularly high risk of developing diabetes. An Electronic Medical Record (EMR) is an evolving concept defined as a systematic collection of electronic health information about individual patients or population. The high dimensionality of EMR's, association rule mining generates a very large set of rules which we need to summarize for easy clinical use. Applied four association rule set summarization techniques and conducted a comparative evaluation to provide guidance regarding their applicability, strengths and weaknesses. We found that all four methods produced summaries that described subpopulations at high risk of diabetes with each method having its clear strength. For our purpose, our extension to the Bottom-Up Summarization (BUS) algorithm produced the most suitable summary

Index Terms—Data Mining, Association Rules, Survival Analysis, Association Rule Summarization.

*Journal of Science and Innovative Engineering & Technology*