

Using Data Mining Techniques to Predict Diabetes and Heart Diseases

Abstract—Modernization and commercialization of life lead to an unhealthy lifestyle that results in increasing non-communicable diseases such as heart diseases and diabetes. Non-communicable diseases have direct result of inaction, inactivity, and idleness of people. Heart diseases and diabetes are two of the most dangerous killers affecting the society. This research aims to produce application software that doctors and other medical practitioners can use to predict the occurrence or recurrence of non-communicable diseases (NCDs). Patients records obtained from Bahrain Defence Force Hospital were used to examine the Developed software is made incorporating relevant secondary data to enable practitioners to use an application which can predict with accuracy, the chances of occurrence or recurrence of NCDs. The predictive data-mining model was adopted in this project. The result of the application showed that the prediction system is capable of predicting NCDs' diseases effectively, efficiently and most importantly, timely. That means the application is capable of helping a physician in making decisions towards patient health risks.