Abstract

Some hospitals are currently trying to develop an information system to help its performance. One of the tested system is e-medical record which handles patients' medical records so it becomes computerized and easier to be used.

To support the e-medical record system, it is suggested to create a certain-disease drug recommendation which diabetes mellitus is used in this study. The disease is chosen because, according to WHO data, there is an increasing number of DM patients in Indonesia. This system is a drug-recommendation program for both DM patients: the insulin-dependent DM and the adult-onset DM. This system is built using PHP algorithm (Perfect Hashing and Pruning), which is a development of the previous DHP algorithm as it is also developed from the apriori algorithm.

This algorithm is chosen because it's got a better ability than apriori algorithm for PHP algorithm show a good/ higher compatibility with a large database size such as hospital database. It is also need not to count the k-itemset candidate events like we do on DHP algorithm. The output of the system is an appropriate recommendation of DM drugs according to test results. The system is expected to be integrated with any other e-health management system and to be used as a designated program to provide any other drug-recommendations.

Keywords: DM, DHP, e-medical record, PHP.