Sequential Pattern Mining from Data of Medical Record with Sequential Pattern Discovery Using Equivalent Classes (SPADE) Algorithm (A Case Study : Bolo Primary Health Care, Bima)

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Abstract : This research was conducted at the Bolo primary health Care in Bima Regency. The purpose of the research is to find out the association pattern that is formed of medical record database from Bolo Primary health care's patient. The data used is secondary data from medical records database PHC. Sequential pattern mining technique is the method that used to analysis. Transaction data generated from Patient_ID, Check_Date and diagnosis. Sequential Pattern Discovery Algorithms Using Equivalent Classes (SPADE) is one of the algorithm in sequential pattern mining, this algorithm find frequent sequences of data transaction, using vertical database and sequence join process. Results of the SPADE algorithm is frequent sequences that then used to form a rule. It technique is used to find the association pattern between items combination. Based on association rules sequential analysis with SPADE algorithm for minimum support 0,03 and minimum confidence 0,75 is gotten 3 association sequential pattern based on the sequence of patient_ID, check_Date and diagnosis data in the Bolo PHC.

Keywords : diagnosis, primary health care, medical record, data mining, sequential pattern mining, SPADE algorithm
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