

**APPLICATION OF THE ASSOCIATION RULE TO DISEASE
DIAGNOSIS USING THE FP-GROWTH ALGORITHM
(Case Study: Dr. H. Moh. Anwar Regional Hospital, Sumenep
Regency)**

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ABSTRACT

Technology exists because human task demands are becoming more and more complicated day by day. This has not only spread to the IT sector, in fact, technology has also penetrated the world of health. In terms of developments in the health sector, in Indonesia itself it seems that it has not developed optimally, big data processing is needed as a large-scale data processing technology concept that not only makes things easier for medical experts, but also for other professions, one of which is in the front office of a hospital. The receptionist can easily find patient data, manage the patient's medical history and diagnose the disease. This is because, currently the distribution of data related to disease is not well linked and information regarding disease diagnosis is needed in disease management, because the supply of medicines or infrastructure to support the health sector is not evenly distributed. In Sumenep, Madura, it is not uncommon for island communities in the district to have to travel long distances to get facilities for treatment. Apart from that, RSUD Dr. H. Moh. Anwar, Sumenep Regency, Madura on this occasion is willing to involve the agency's data to be processed into information which is expected to be useful again for the agency and for the common good. Research with data obtained through a query process by the hospital and will be processed using the Association Rule Fp-Growth algorithm, aiming to find the relationship between disease diagnoses in a sub-district in Sumenep Regency, and data processing will be implemented using the Python programming language with the final result of Data processing takes the form of confidence calculations regarding information from the diagnosis of each sub-district.

Keywords: Technology, Big Data, Disease Diagnosis, RSUD Dr. H. Moh. Anwar, Association Rules Fp-Growth